DOCUMENT RESUME

ED 283 246 EA 019 464

AUTHOR	Pine, Patricia
TITLE	Raising Standards in Schools: Problems and Solutions. AASA Critical Issues Report.
INSTITUTION	American Association of School Administrators, Arlington, Va.
REPORT NO	ISBN-0-87652-099-9
PUB DATE	85
NOTE	88p.; Produced by Education News Service.
PUB TYPE	Information Analyses (070) -- Guides - Non-Classroom Use (055) -- Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	*Academic Achievement; *Academic Standards; *Achievement Gains; College Bound Students; Core Curriculum; Educational Change; *Educational Improvement; Elementary Secondary Education; Graduation Requirements; High Risk Students; National Surveys; Public Schools; Time on Task
IDENTIFIERS	*Excellence in Education

ABSTRACT

In a survey of 1,500 administrators, most of the 400 respondents agreed by an 8 to 1 margin that reforms to raise academic standards in public schools are necessary. In high schools, a decline in reading, vocabulary, and math skills is due basically to a decreased academic emphasis. Solutions include more required courses, more opportunities for writing and laboratory activities, homework in all classes, and a rigid core curriculum. Second, the absence of rigorous graduation requirements in high schools seems to account for an increase in remedial college enrollments. Achievement tests, advanced placement courses, and counseling are strategies to make college-bound students aim higher. Third, students become negligent when their teachers demand little. Districts are attempting to raise expectations through methods such as grading, homework, and attendance policies. Other academic reforms involve productive use of time, participation of key working groups in the standard-raising process, and continued attention to disadvantaged students. Recently, districts have been concentrating on elementary school standards by involving parents, providing attention to "high risk" students, monitoring students, and using tests for diagnosis. Appendices contain: (1) the results of a polling of 1,200 adults concerning standard-setting measures; and (2) minimum state graduation requirements. (RG)

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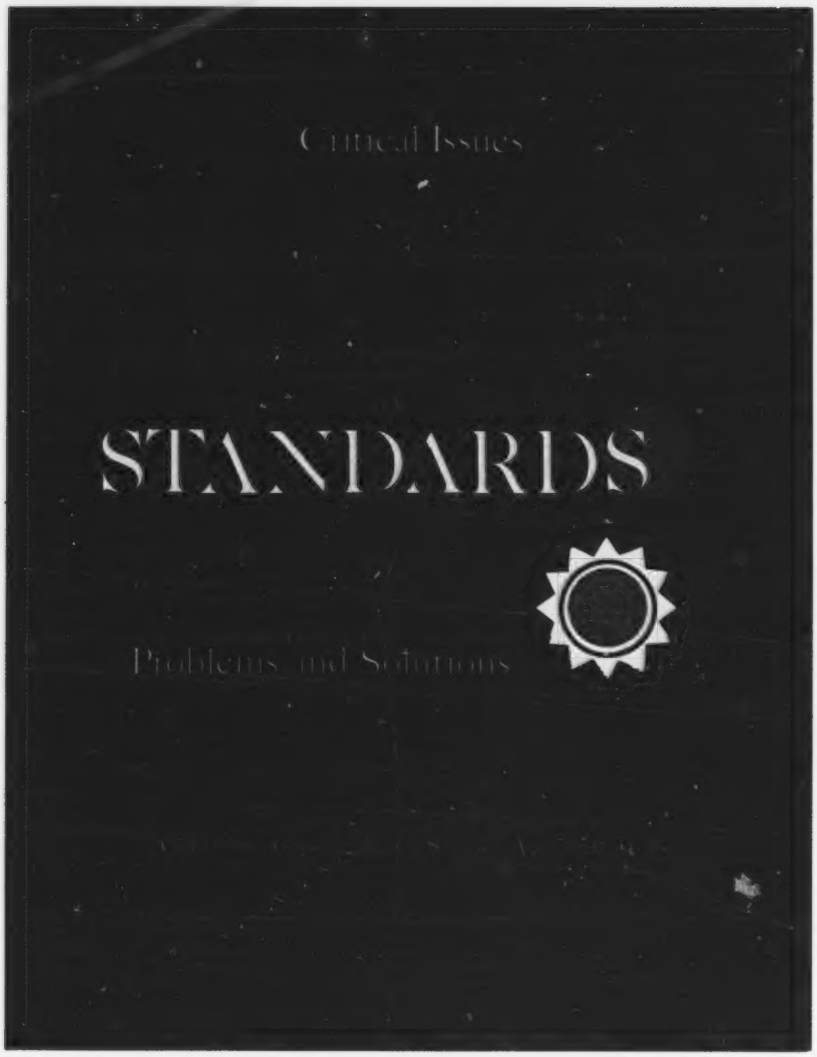

by Patricia Pine

Produced by
Education News Service
for the
American Association of School Administrators

The AASA Critical Issues Series

Many of the critical issues facing schools today are controversial. Seldom is there one best answer in dealing with these issues. What is best in one community may not be the best in another. That is why the American Association of School Administrators (AASA) decided to produce a series of Critical Issues Reports. These in-depth reports provide a wealth of information and ideas to help school administrators and school boards deal effectively with the challenge of assuring high quality education for students.

Raising Standards in Schools: Problems and Solutions is the 17th report in the AASA Critical Issues Series. Like the others, it provides an analysis and reports successful practices and advice from authorities. Many of the concerns and ideas included in this book were shared with AASA through a nationwide survey of superintendents. It is our hope that the information included in this publication will help schools plan and prepare for what they face in the years ahead.

Our thanks to those who helped make this publication a reality — school administrators and other faculty members; state education personnel; and national advisory groups, committees, and organizations.

The manuscript was written by Patricia Pine, an education writer based in Washington, D.C.

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Editor, AASA Critical Issues Reports: Shirley Boes Neill
Design and Graphics: Norman Lubeck, Burlingame, Calif.
Copyright 1985, American Association of School Administrators
Library of Congress Card No. 85-71386
ISBN # 0-87652-099-9
Single copy: $13.95. Two to nine copies, 10% discount; 10 or more copies, 20% discount. Please add $2.50 to orders of $20 and under for postage and handling. Orders for less than $20 must be accompanied by payment in full. Order from AASA, 1801 North Moore St., Arlington, Va. 22209. Stock No. 021-00145.

This report was reviewed by AASA and approved for publication. Approval does not signify that the contents reflect the views or policies of AASA.

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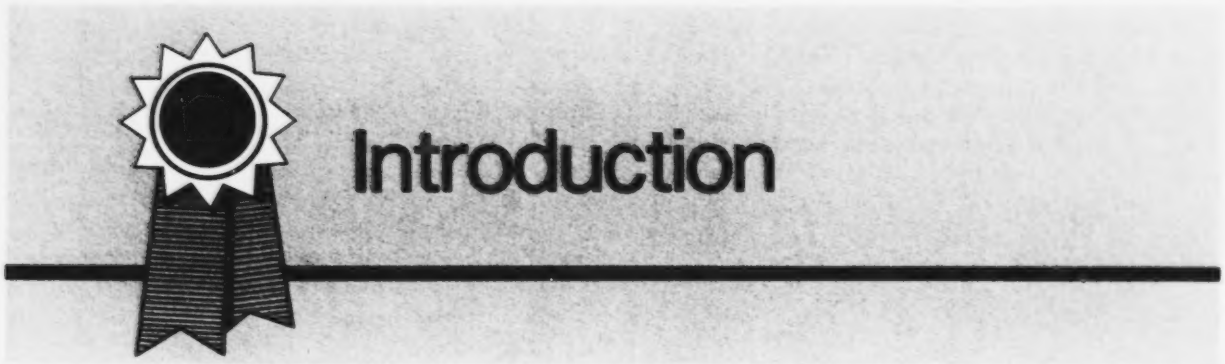


Introduction

The coincidental release in 1983-84 of a series of major studies of the nation's public schools has triggered a massive reform movement to upgrade the quality of education from kindergarten through high school.

School administrators and school boards from coast to coast are feeling its impact.

Debates about "reform," "excellence," "rigor," and how to increase the quality of educational programs are common at school board meetings in most districts. And, in many cases, the debates are followed by bold action.

This action, usually with strong community support, takes many forms, but in almost all cases it involves setting standards — higher standards.

The national studies and reports, which in most cases focused more on secondary than on elementary schools, serve as helpful guides and "starting points" as districts seek their own solutions.

The best known — and most critical of the reports — is *A Nation at Risk: The Imperative for Education Reform*, by the National Commission on Excellence in Education. Much quoted — and sometimes much disputed — is its sobering conclusion that "the educational foundations of our society are presently being eroded by a rising tide of mediocrity . . . that threatens our very future as a nation and a people."

Other reports echoed the Commission's alarm in less-dramatic terms.

Business and industrial groups, state officials, and educators expressed their concern in *Action for Excellence: A Comprehensive Plan To Improve Our Nation's Schools,* by the Education Commission of the States' Task Force on Education for Economic Growth.

Theodore R. Sizer argued in *Horace's Compromise* that the time demands and the structure of the typical suburban high school force even dedicated, able teachers to compromise on quality. Sizer's book is part of a five-year inquiry into adolescent education sponsored jointly by the National Association of Secondary School Principals and the Commission on Educational Issues of the National Association of Independent Schools.

In *High School: A Report on Secondary Education in America,* supported by the Carnegie Foundation for the Advancement of Teaching, Ernest Boyer, former U.S. Commissioner of Education, described a situation where students and teachers agreed to ask little of one another.

The National Science Board's Commission on Precollege Education in Mathematics, Science, and Technology discovered serious problems in all three subjects of its special interest, and a panel that studied foreign language teaching in the United States found national indifference toward that field in this country.

Almost in unison, the reports detected a decline in educational quality during recent years.

What's Needed

The reports seem to agree that what education needs most is an infusion of excellence or quality, terms that translate, for all practical purposes, into a demand for higher academic standards.

In *A Review and Comment on the National Reports,* prepared for the National Association of Secondary School Principals, Theodore Sizer pointed out that the documents endorse the idea that the primary function of a high school is to help students use their minds. "This is an intellectual aim," Sizer wrote, "though some com-

mentators avoid using the word because for many it connotes elitism or irrelevance. An excellent education is assumed to be one in which the students show they can use their minds well by excelling in traditional ways in academic subjects . . ."

A poll of 1,200 adults conducted for the U.S. Department of Education's National Institute of Education in early 1985 found strong support for the teaching of academic subjects (e.g., math, science, English, and social studies) as a basic goal for secondary schools. Ninety-two percent of the public indicated strong support for these academic goals. The next highest goal in importance, in the public's view, is the encouragement of personal growth (e.g., trying to build student's self-understanding, creativity, and self-confidence).

Here are some other findings of the poll:

- The public strongly supported graduation and promotion tests. When asked whether their local high school should have high school graduation exams or junior high promotion tests, more than 90 percent said "yes."

- More than 80 percent of the respondents were also in favor of: increasing the proportion of required courses, limiting class size, reducing student absenteeism, testing teachers, and having teachers spend one month each summer upgrading their knowledge or skills.

- About two-thirds of the respondents supported these proposals: increasing teachers' salaries, assigning 1½ hours of homework each day, paying merit increases to outstanding teachers, and assigning disruptive students to alternative classrooms.

Note: See a summary of the poll in the Appendix.

A Shift in Views

The prevailing views about what schools should be doing depart sharply from the types of things schools have been urged to do during the past 20 years or so. The cry for relevance has all but disappeared. In fact, commentators see a resemblance between recent proposals to raise standards and the exhortations of the 1950s. Then as now, reformers worried that the international position of the United States was imperiled because the schools were intellectually flaccid.

Comparisons with the educational systems of other nations are inevitable. To illustrate: A spokesperson for the California State Department of Education explained the need for higher standards in this way:

". . . American industry is increasingly less competitive with industry in many other advanced countries. The lower educational standards of American schools are a key element in America's growing inability to compete."

The prevailing views about what the schools should be doing have changed in a manner that many educators consider abrupt.

Such changes have recurred periodically during the past century. In *The Troubled Crusade,* Diane Ravitch, educational historian at Columbia University Teachers College, lends perspective to these changes. One set of standards was defined in 1893, when the National Education Association's "Committee of Ten" declared that the ideal high school curriculum should consist of mathematics, foreign language, and science, whether students were bound for college or not.

By 1918, the academic winds had shifted. Publication of the *Cardinal Principles of Secondary Education* heralded a new philosophy. High schools should concentrate on areas such as life adjustment and personal development courses in health, vocation, citizenship, worthy use of leisure, and ethical character. "So little did the Commission think of traditional, school-bound knowledge that the original draft of the report failed to include 'command of the fundamental principles,' its only reference to intellectual development as a major objective of secondary education," Ravitch said.

Reform proposals made in ensuing years have tended to swing between the positions defined by the two groups, influenced by social and political trends that touch the country as a whole. In conservative times, concern about academic achievement, curriculum, and discipline dominate; in more liberal periods, the focus shifts to disadvantaged youngsters and the need to broaden the role of the schools.

The Emphasis Today

The hallmarks of today's reform movement are an emphasis on academic standards and concern over the qualifications of teachers.

Many of today's ideas for reform are drawn from research on school effectiveness, a body of knowledge mostly accumulated over the last 10

years that compares the characteristics of successful and less-successful schools.

In a nutshell, the research found that in effective schools (i.e., those where student achievement is high):

- Teachers hold high expectations for pupils and believe they can learn despite economic and social disadvantages.
- Educators have a clear sense of purpose and share agreed-upon goals.
- Instruction is well managed.
- Sufficient time is provided for learning.
- The school furnishes a safe, orderly environment.
- Principals place a high priority on instructional goals and work with staff to reach consensus about these goals and the methods for attaining them.

What Should Be Done?

Here, in brief, are the actions that many advisory groups, commissions, and researchers generally urge schools to take:

- **Raising expectations.** Underlying the reform documents is the assumption that if educators will only insist on better work from students, they will get it. Schools should set precise and explicit standards concerning high school graduation requirements, grade-to-grade promotion, course content, discipline, attendance, and homework. Grades should reflect what a student has accomplished.
- **Restoring a sense of purpose.** Educators should concentrate on their academic mission. If the schools try to provide a wide array of social services, they will neglect the basic purposes of schooling, because resources will be spread too thinly.
- **Imposing a core curriculum.** Students should be firmly grounded in a core of studies that prepares them for work, citizenship, and further education. They should not be allowed to coast through high school on electives.
- **Testing and accountability.** Proof of excellence lies in demonstrating mastery in a measurable fashion, and scores on standardized tests are very important. Tests should be integrated with curriculum to determine whether students are learning what schools are trying to teach. Promotion to higher grade levels should be based on clear indications that prerequisite skills have, indeed, been learned. And educators should demand more than mastery of the minimum competencies now required in many states. Test data from different sources should be considered in student evaluation.
- **Easing the transition between high school and college.** The explosive growth of college remedial programs points to the need for better high school preparation. Too many college bound youngsters have abandoned rigorous precollege mathematics, English, and composition for less demanding general track courses that prepare them for neither college nor work. Colleges are raising their entrance requirements, and high school standards must increase if students are to be adequately prepared.
- **Better use of time.** American students spend less time in school than those in many other countries, and too much of this precious instructional time is wasted. Schools should use time more efficiently, give more homework, and insist on attendance. Some studies recommend a seven-hour school day and a school year lasting 200 to 220 days, but these measures are often unpopular with educators and the public.
- **Upgrading professional educators.** Teachers hold an important key to educational quality, but present trends are working against a large, steady supply of outstanding teachers. Recommendations for change range over a wide gamut of possible actions, from raising teachers' salaries and basing their pay on performance, to changing the way they are trained, certified, recruited, and treated once they are in the profession.

What Is Being Done?

More — and more varied — kinds of activities to raise standards are under way across the country than can be covered in a single volume. The U.S. Department of Education reported, for example, that by mid-1984 these reforms were under way:

- Forty-eight states had considered new high school graduation requirements, and 35 had approved changes. (See the Appendix for a listing of minimum graduation requirements in each state.)

- Twenty-one states had taken steps to improve textbooks and instructional materials.
- Eight states had approved lengthening the school day or year or passed other mandates lengthening the amount of time for instruction.
- Twenty-four had considered some kind of master teacher or career ladder program.
- Other changes that were being widely considered and implemented included intensive training for teachers and principals, both pre-service and inservice; significant changes in testing and assessment of student achievement; and an emphasis on more challenging and more frequent reading and writing.

What To Do Now

No report offers a reform slate for individual school districts. In many cases, in fact, what one district must do to raise standards will vary widely from the required actions in a neighboring district.

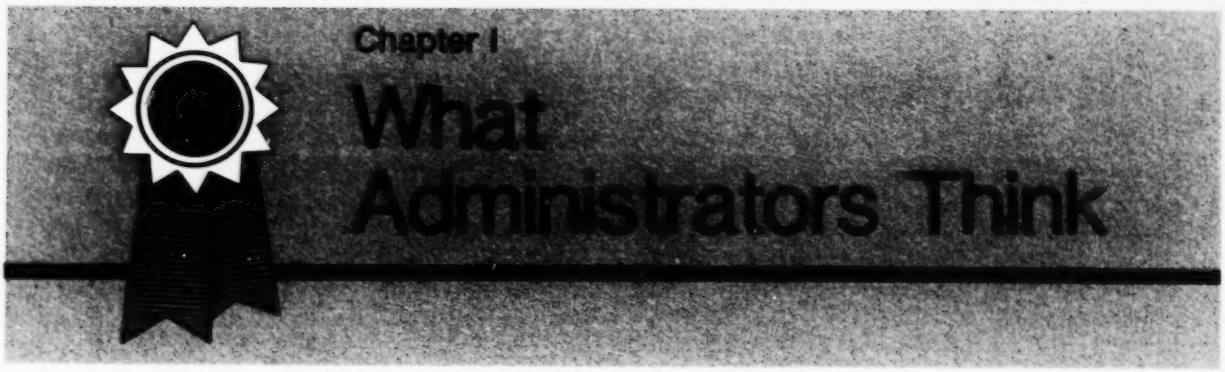
Local circumstances must be prime considerations in what is done — and when. As noted by respondents to the AASA survey for this report, lack of money is an inhibiting factor for some districts, however intent they are to raise standards.

Many administrators, on the other hand, have taken advantage of the publicity accompanying the release of the reform documents to develop new support for their schools, to invigorate staff, and to involve parents.

This report is an attempt to present those student-related measures to raise standards which are of greatest concern to administrators. Because of space limitations, teacher-related measures are not included. School administrators and board members will need to be alert, however, to reports, changes, and new initiatives affecting teacher admissions standards, training, certification, and compensation.

In initiating and carrying out measures to raise standards, administrators and boards should keep in mind the words of U.S. Secretary of Education William Bennett:

"In this period of renewal, we should resist both those who declare premature victory — 'the problem is solved' — as well as the cynics and the dampers, those who say, 'you can't do anything, what's the point of trying?' To this we should respond: 'We can do something, we are doing something, and we will stay at it.'"



In a survey for this Critical Issues Report, AASA asked 1,500 members whether they believed academic standards should be raised.

The results. By an overwhelming 8 to 1 margin, the over 400 respondents answered "yes." Not intended to provide a scientific sampling of administrators, the survey was used to gain information and insights from a large number of administrators nationwide.

Here are some of their replies:

- "Academic standards need to be improved by setting clear standards and establishing competency in all subject areas for all students. This can only be accomplished by higher levels of expectations of students and better preparation in teaching skills. A sweeping change is needed to strengthen and improve academic standards. I do not believe merit pay or a longer student year is the answer for improvement." — Tyrone Thomas, superintendent, Mendon, Ohio.

- "We have developed a situation where demanding some amount of excellence is viewed as unhumanistic. As a result we have lowered standards in many classes to a point where very little is learned. It's time to change." — Emmett Brown, superintendent, West Harrison Community Schools, Mondamin, Iowa.

- "Schools use far too much time in areas that have no academic outcome. My guess is that the average high school in the United States requires the student to enroll in four or five 50-minute courses daily. One or more of those courses may not be academic. The students' perspective on failure in schoolwork and its consequences does not even remotely approach that of a comparable Japanese student." — Joseph Foster, superintendent, Shelbyville, Ill.

Raising Expectations

Some respondents said that raising expectations would automatically have a beneficial effect on students. To illustrate:

- "Students of high-school age generally do not see a real value to high school educational opportunities . . . . Standards and expectations are woefully low. Students will perform to the standards set and, if too low, that is what they will learn. Students will perform to high standards and expectations if staff and boards of education establish such." — Bill Gogan, superintendent, Ord, Nebr.

- "Students respond to the demands we make on them. If we don't ask for much, they don't give much. If we ask for their best, they will give their best." — Donald Dittman, superintendent, Wabaunsee, Kans.

'Yes, But . . . .'

Many administrators, while favoring more emphasis on academic standards, did not voice the kind of urgency contained in the many recent reform documents. "Please consider my comments carefully," noted Charles Thacker, assistant superintendent of instruction, Carrollton-Farmers Branch District, Carrollton, Tex. "One would be dastardly to say 'no' [to the question of whether standards should be raised], but there are many ramifications to the issue of standards."

Many respondents to the Critical Issues survey regarded the current press for educational reform as one more step in a continuing movement toward better education rather than as a crisis.

"How can you not want to improve and clarify

Educating or 'Keeping Them Out of Our Hair'?

"What we need to do most is to have a clearer definition in mind of what it is valuable to teach youngsters and of how those values relate to their needs at the present time. We don't know what it is we want children to learn, nor do we understand why we want them to learn it. At the same time, we are confronted with the problem of having to do something with youngsters, and so we try to find something for them to do which will at least keep them entertained and out of our hair. Thus we resort not so much to activity which is designed to accomplish the goal of achieving better understanding of themselves and a better understanding of the world or the community that they live in, but to activity which is designed simply to keep them from overrunning us."

— Francis R. Taormina
Assistant Superintendent
Niskayuna Central School District
Schenectady, N.Y.

standards?" asked Alan D. Osterndorf, superintendent, Columbia Heights, Minn. "This does not mean that standards are low at the present time, but that school systems must always look to improve."

'No, We're Doing OK'

Among those who answered "no " to the need for raising standards was Jack T. James, superintendent of the LaVega schools, Waco, Tex. "Standards are more than adequate if administrators and teachers will do their jobs," he said.

Some of those who did not think standards were in need of an overhaul referred not to the situation nationwide, but to their own districts.

Increase Course Requirements?

Many respondents said they felt that increasing course requirements, as proposed in some of the national reform documents, was the wrong way to go.

"To require a third year of science for all students would dilute the opportunities our college-bound students have and deny others a chance to take an additional vocational class," argued Gary L. Webber, superintendent, Fromberg, Mont.

Some respondents feared the effect that stiffer requirements might have on students of different ability levels. Others cited lack of local public support for higher standards as a reason not to take action.

If Not, Why Not?

The most serious obstacle in the way of reform, in the opinion of respondents to the Critical Issues survey, is money.

All but a small minority of survey respondents anticipate cost problems — for extra staff, facilities, more time in school, and higher salaries for teachers.

Many respondents thought that educators' attitudes would be a major impediment to reform. Apathetic teachers and administrators, unions, resistance of staff members who might lose their jobs as electives shrink, and the concurrent difficulty of hiring new teachers in shortage areas were seen as potential problems.

Other respondents cited concerns about students as obstacles to increasing standards. Some said many students would be unable to reach higher standards, causing dropout rates to skyrocket.

What Should Be Done?

One part of the AASA survey asked administrators to list three or four first steps that a district should take to improve student learning at the elementary, middle, and high school levels.

The responses revealed a high level of agreement in seven areas:

1. Inservice training. More inservice training on time-on-task and classroom management was perceived as an acute need, along with inservice

in subject areas such as math and science. Many respondents also saw a need for inservice training for principals and other administrators to help them in their roles as instructional leaders.

2. Raising expectations. A large number of administrators cited raising expectations as one of the first steps they would take toward attaining higher standards. They stressed the need to clearly articulate expectations to students and parents, and to apply consistent standards districtwide on grading, homework, attendance, and discipline.

3. Restricting extracurricular activities. Holding extracurricular activities at times that did not interfere with instruction, or restricting them to students with certain grade averages was a frequently cited priority.

4. Improving testing practices. As a key to educational improvement, many respondents mentioned better testing and test monitoring, along with integrating test results with curriculum development.

5. Promotion gates; mastery of subjects. Many administrators believed that promotion gates should be established at the elementary level, and some respondents also wanted exit exams in subject matter, both at the elementary and high school levels. Several pointed out that basic skills should be mastered in elementary school, freeing the high school for more advanced learning.

Programs to help students develop study skills and higher order thinking skills were sometimes seen as priorities for both elementary and secondary schools. Small classes, mastery learning, and better guidance services also were mentioned often.

6. Emphasizing values, achievement. The importance of making students more aware of the value of education concerned many respondents. "We ought to emphasize over and over to our young people the importance of learning," said John Pagen, superintendent of the Warren (Mich.) Consolidated Schools.

Many respondents said their districts were starting to give students who excel in academics more recognition.

Many also felt that disruptive students should be removed from high school, or, at least, that discipline standards should be firm. "Education is a privilege and not a right," said Robert K. Muhs Sr., superintendent of the Newport (N.Dak.) Public Schools.

> **"Even though we may fall short of our ultimate hopes and aspirations, we will in the process of having striven for higher standards accomplish more and grow more and learn more than if the standards were not there for us to seek, or if we had not striven for excellence at all."**
>
> **— David P. Gardner**
> **President**
> **University of California**

7. Communicating. The importance of keeping up a steady stream of communication with the community, especially with parents, was also stressed, as one part of an administrator's leadership responsibilities. "Communicate, communicate, with parents, teachers, and the community about goals and objectives for students," advised Steve Babst, superintendent, Holdrege, Nebr.

Agreement with Earlier Study

On a number of key points, respondents to the Critical Issues survey agreed with administrators who answered a 1982 survey conducted by the U.S. Department of Education's National Center for Education Statistics (NCES). In that study, administrators were asked to rate the relative importance of nine factors for increasing achievement of high school students. The results:

- Two-thirds of those sampled attached high importance to higher attendance rates.
- Almost one-half (47 percent) strongly favored increasing the number of required core courses and the number of study skills courses.
- More than one-quarter rated minimum competency requirements for graduation and expanded inservice training for teachers as highly important.
- Other activities the administrators suggested included increasing the amount of homework, extending the school day or the school year, and establishing or increasing minimum competency testing for teachers. Fewer than 10 percent of the administrators felt these alternatives were highly important, although nearly 50 percent felt that increasing homework was at least moderately important.

The spark that ignited the school reform movement of the 1980s was the test score declines of high school students in the 1970s.

The declines, as measured by performance on the College Board's Scholastic Aptitude Test and the National Assessment of Educational Progress, were attributed to many factors. Among them: demographic changes, lower standards, and the poor academic preparation of new teachers.

However, as noted by researchers at the Educational Testing Service (ETS), "there is little systematic research that relates these factors to test score decline." These researchers, working under a federally funded project sponsored by the U.S. Department of Education's National Institute of Education, set out to determine the causes of the decline.

Then, the ETS research team, under the direction of Donald A. Rock, came up with recommendations for district, state, and federal policy makers to implement.

Following is a summary of the findings and recommendations, as detailed in a briefing paper, "Factors Associated with Test Score Decline" (ETS; December 1984):

The major reason for the decline (in vocabulary, reading, and math test scores) between 1972 and 1980 was a decreased academic emphasis in schools.

"The impact of this shift in emphasis," the researchers said, "fell primarily on white and upper and middle class students." They added: "Federal and state programs designed to strengthen basic skills in reading and mathematics appear to have prevented comparable score declines among low socioeconomic status blacks in vocabulary and reading and to have contributed to the score increase among this same group in mathematics."

The researchers noted that the largest declines on achievement tests between 1972 and 1980 occurred in vocabulary and reading. The typical senior in 1980 (a student at the 50 percentile in vocabulary and reading achievement) would rank at about the 41st percentile among the 1972 seniors in these two areas.

Similarly, the researchers said, a 1980 senior with average mathematics achievement would be at the 45th percentile when compared with the 1972 seniors.

The changes in individual student behaviors that contributed most to the score decline, according to the researchers, were (in approximate order of importance):

- Reduced semesters of foreign language courses. (Students took 2.64 semesters in 1972 and 1.65 semesters in 1980.) This reduction was proportionately greater for females.

- Reduced number of hours of homework. Seniors in 1972 reported doing 4.55 hours of homework per week; in 1980, they reported 4.05 hours. The test score declines in reading and math were found primarily among students who reported doing less than 5 hours of homework per week.

- Reduced number of science courses. (Students took 3.71 semesters of science in 1972; 3.46 semesters in 1980.)

- Reduced number of students in the academic track. (A drop from 45.7 percent of all seniors in 1972 to 38.1 percent in 1980.)

The researchers also ranked the changes in individual school characteristics that contributed

most to the score decline:

- An increase in the proportion of students rating the school as needing more academic emphasis. (In 1972, 50.3 percent agreed with the statement that their school should provide more academic emphasis; by 1980, this had increased to 71.7 percent.)
- A decrease in homework done by students.
- A decrease in semesters of foreign language courses taken by students.
- An increase in schools with a high dropout rate. (Schools with dropout rates of 20 percent or more grew by 6 percentage points, from 3.6 percent of all high schools in 1972 to 9.6 percent in 1980. Schools with a dropout rate between 10 and 19 percent increased from 13.4 to 20.4 percent.)
- A decrease in laboratory courses taken by students.
- A decrease in students' rating of their school's reputation in the community.
- A decrease in students' rating of the quality of their academic instruction.
- A decrease in students' rating of the physical condition of their school buildings.

Recommendations

What are the implications of these findings for policy makers? Here's what the researchers recommended:

- Schools should increase the required number of courses in the "New Basics" (English, math, science, social studies, computer science, and, for the college bound, foreign language.) However, the researchers noted, these courses should not be provided at the expense of remedial work in reading and math when it is needed.
- Schools should provide more frequent opportunities for students to write and more opportunities for students to participate in laboratory courses.
- Course content and instructional methods should be reviewed and upgraded, as necessary, to insure more rigorous content.
- Appropriate amounts of homework should be assigned in all courses.
- The federal government, in cooperation with the state and local school districts, should continue to provide special programs for educationally and economically disadvantaged students, the handicapped, and language minority students.

Note. The researchers used data from the following sources: NCES' National Longitudinal Study of the High School Senior Class of 1972 (a sample of over 21,000 seniors who attended 1,200 public and private high schools); NCES' High School and Beyond Study (a longitudinal study of 28,000 seniors attending 1,015 private and public high schools in 1980); and achievement tests in vocabulary, mathematics, and reading administered to seniors at the time of the surveys. For more information, contact Donald A. Rock at the Educational Testing Service, Rosedale Rd., Princeton, N.J. 08541.

Most of this chapter focuses on the ETS researchers' top recommendation — that schools should increase the required number of academic courses. Many of the other recommendations are discussed in subsequent chapters of this report.

Core Curriculum

The need for a more rigorous academic curriculum is one of the most consistent themes of the educational reform movement of the 1980s.

Reformers are unanimous in recommending that students should definitely be taking more required courses than they have during the past decade or so. The disagreement comes in discussions of which subjects should be in a "core" or on how much of a student's time should be spent in core courses.

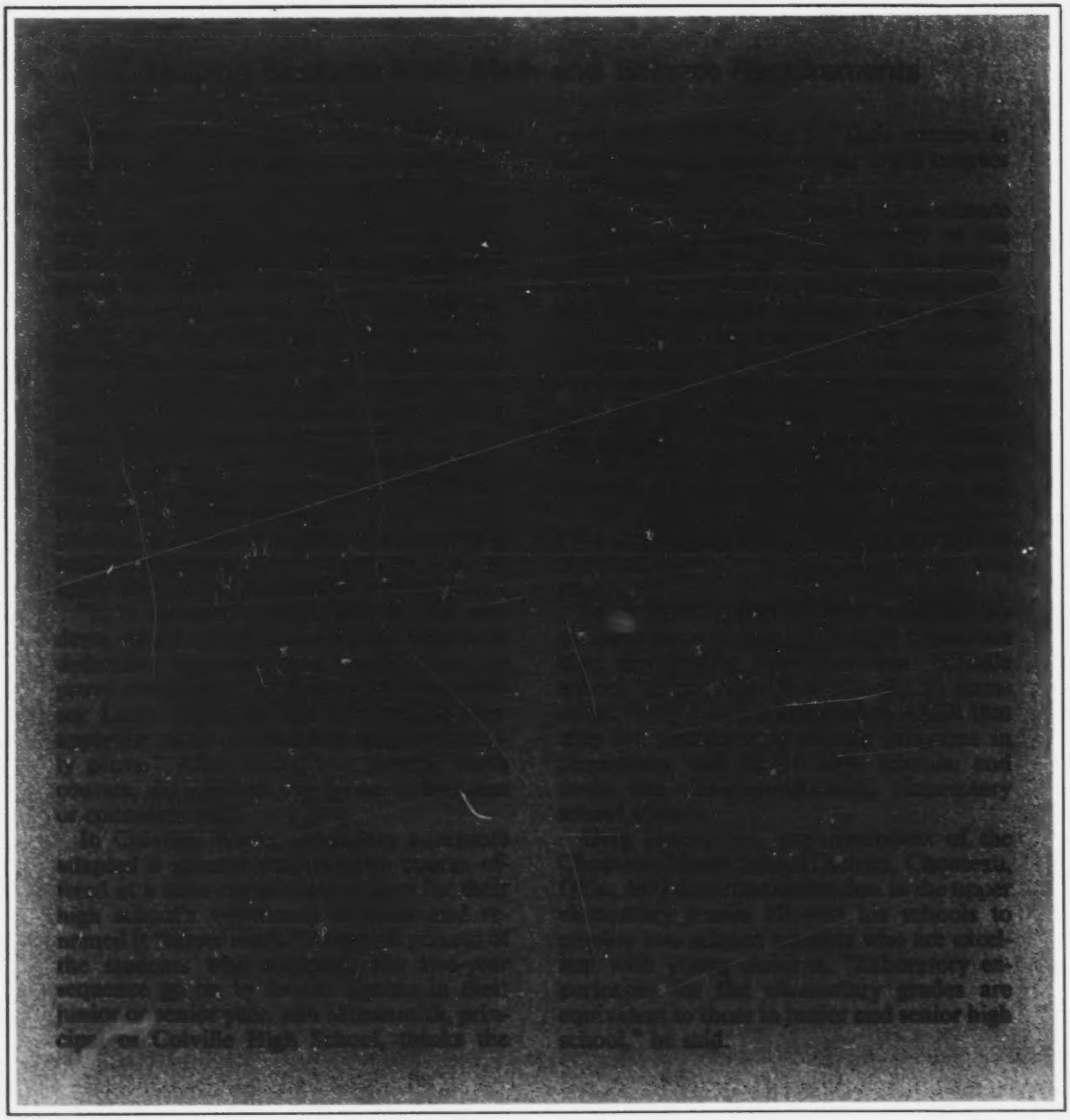
Required core subjects usually tend to reflect traditional academics: English classes dwell on literature and composition; social studies courses trace the long sweep of human history and social development.

Reform Proposals

Following are the requirements specified in several of the reform proposals:

A Nation at Risk defines required courses in terms of the "Five New Basics":

- 4 years of English
- 3 years of mathematics
- 3 years of science
- 3 years of social studies
- ½ year of computer literacy



In addition, the National Commission on Excellence in Education strongly recommended two years of foreign language for college-bound students. It also stated that high schools should provide personal, occupational, and arts courses. Standards for these courses, it added, should be as rigorous as those applied to the New Basics.

The Board of Directors of the National Association of Secondary School Principals seconded *A Nation at Risk*'s curriculum recommendations for *college-bound students.* The Board said in its statement, issued in September 1983, that two years each of math and science would suffice for job-bound students. It said these students should have opportunities for occupational and technical skills development. And for students who test substantially below grade level, the Board recommended remedial courses in the 3 R's.

Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching, recommended this common core of studies in *High School: A Report on Secondary Education in America* (Harper & Row, New York City):

- 5 units of language (consisting of 1 unit of basic English/writing, ½ unit of speech, 1 unit of literature, 2 units of foreign language, ½ unit of arts).
- 2½ units of history (consisting of 1 unit of U.S. history, 1 unit of western civilization, ½ unit of non-western studies).
- 1 unit of civics.
- 2 units of science (consisting of 1 unit of physical science and 1 unit of biological science).
- 2 units of mathematics.
- ½ unit of technology.
- ½ unit of health.
- ½ unit, "Seminar on Work."
- ½ unit, "Senior Independent Project."

In addition, Boyer called for a "service unit." Intended to allow students to feel needed and valued, this unit would be spent in school or community volunteer work determined by students and spread over each student's high school years.

Boyer also recommended that core courses dominate the freshman and sophomore years, giving students an opportunity in their junior and senior years to take electives in preparation for further work or education.

In his book, *Horace's Compromise: The Dilemma of the American High School,* Theodore Sizer, chairman of "A Study of High Schools," said he would reorganize the high school curriculum from top to bottom, replacing traditional disciplines with studies clustered in four main areas: inquiry and expression, mathematics and science, philosophy and history, and literature and the arts.

State Requirements

Most states have not mandated as much mathematics and science as recommended in *A Nation at Risk.* Among the states that either are considering or have approved new high school graduation requirements, a four-year language arts (or communications skills) requirement is common, as is a three-year social studies requirement. Most states, however, have stopped with two years of math and science, while only a few states require computer literacy.

States calling for three years of math include Connecticut, Florida, Kentucky, Louisiana, Pennsylvania, South Carolina, Texas, and Vermont. (Several other states require three years of math for college prep students and one or two years for other students.)

States calling for three years of science are Florida, Louisiana, Pennsylvania, and Vermont, with several others insisting on three years for only college prep students.

See the Appendix for more detailed listings of state requirements.

The Public's Views

A poll of 1,200 adults in early 1985 found overwhelming support for almost all of the curriculum recommendations in *A Nation at Risk.* The poll was sponsored by the U.S. Department of Education's National Institute of Education.

Following are the percentages of the public favoring a specified number of years in various subject areas as a high school graduation requirement:

Requirement	Percent of Public Favoring Requirement
3 years math	90%
½ year computer science	88%
2 years physical education*	73%
4 years English	72.5%
3 years social studies	70.1%
3 years science	69.6%
2 years art, drama, or music*	50.6%
2 years foreign language (for college bound students)	59.3%

*Not specified as one of the "New Basics" in *A Nation at Risk.*

School Administrators' Views

Respondents to the AASA Critical Issues survey for this report were widely divided about the value of a core curriculum.

Some of the reasons they offered in support of a core curriculum included:

- A core curriculum could "practically guarantee" the teaching of "minimum basic survival skills."
- It would define what a high school diploma means.
- It would prepare students for the technical jobs of the future.
- It would give the nation a common thread of culture.

Other respondents said they opposed a required core curriculum for all students for these reasons:

- A core curriculum would limit students' chances by eliminating options to deal with individual interests and needs.
- It would have a severe impact on the majority of students, who are not going to college.
- It would require some students to take courses "they really don't need."
- It would have a "crushing effect" on the number of students going into the fine arts, vocational programs, and the practical arts.

Following are some of specific responses administrators made in answer to the survey question: "Is a core of required courses desirable for all secondary students?"

Yes — I believe that we need a core of basic curriculum for all students because our national technology is headed in a direction that will make specialized training obsolete before the student has worked for many years. A core curriculum will assist in basic understanding, so people may enter any training necessary. — Terry Humble, superintendent, Harrison (Ark.) School District

Yes — I don't believe adolescents have the maturity to pick what is "right" for themselves. Also, I favor state-mandated core comprehensive curriculum offerings that include a certain minimum number of electives. — John Widvey, superintendent, Battle Lake (Minn.) Public Schools

Yes — Everyone needs to have a basic body of knowledge. Even though not all *students will go to college, they will have to deal with a complex society with complex issues. Giving that basic body of knowledge a short shrift because a student is non-academic doesn't make his vote less important.* — Donald V. Cairn, superintendent, Nyssa (Oreg.) Public Schools

Yes — [We need] a core of "basic" courses, but not to the same level of proficiency. — Joe E. Gentry, superintendent, Rock Hill (S.C.) Schools

Yes — As long as the core is for all students and not just for college prep. — Frank Bertino, superintendent, Wallace, Idaho

No — We do not feel that a core curriculum should be imposed upon all students. In large urban school districts, students come to us with diverse backgrounds and diverse educational needs. If every student had to be proficient in three years of science, we fear that many students would never graduate. We believe that even in the thrust for excellence in education, there should be room for choices for students based on their personal needs. — Berry G. Mason, assistant superintendent, Oklahoma City Public Schools

No — On the surface it is simplistically compelling, but no unilateral change is going to make dull kids bright or slow kids fast. Increasing failure and dropout rates are "back door" ways of improving our lot. — Donald Hayes, superintendent, Hopedale (Mass.) Public Schools

No — In 1920, only 20 percent of the secondary-aged students were attending high school. By 1970 more than 70 percent were in high school; now the percentage has increased to 75 percent. Not all students are academically inclined. Half of the students do not attend four-year colleges. All students need to take four years of English, two or three years of social studies, et cetera. However, there should also be electives to meet individual interests and needs. — George H. Daniel, superintendent, Bound Brook (N.J.) School District

No — Students have different aptitudes and interests. Some learn best by "doing" experience. Why try to make a mechanic a foreign language or three-year science student? Our graduates currently are the finest and most successful one would find anywhere or at any time. — Robert H. Horn, director of student services, Ocean County Vocational-Technical Schools, Toms Rivers, N.J.

No — If required courses are adequate (in our case, 12 units) and electives offered are academic (college preparatory) or skill development (voc-tech), students in effect receive a "core curriculum" but still have the freedom of making individual selections. We simply do not offer Outdoor Living I, II, and III or Dating Etiquette type of courses. — Warren C. Carmichael, superintendent, Bristow (Okla.) Public Schools

Who Should Take the Core?

Perhaps the primary concern among educators about a heavily academic core curriculum is whether all students should be expected to complete it. Critics have charged the National Commission on Excellence in Education with devoting its attention strictly to college-bound students and neglecting the rest. Commission members bridled at this suggestion, however, and insisted they did not have just college preparatory students in mind when they issued their report.

None of the reform proposals suggested that all students should be expected to finish the same courses — at the same level of difficulty, or in the same period of time. However, they urged school districts to put far more effort into preparing courses and sequencing them so that non-college-bound youngsters have a chance at a challenging and well-planned curriculum.

Some who have studied the question of a core believe that the "average" student may be a chief beneficiary of the drive for core studies. A study of comprehensive high schools in California in 1983 by Stanford University researchers pointed out the need for more attention in this area. The researchers said colleges help drive the curriculum for college preparatory students and basic competency testing helps schools determine what lower-track students must accomplish. But, they said, the curriculum for middle-range students remains largely unfocused. General track course sequences frequently are incomplete, they added, ending with one or two classes, and movement to sequenced courses in the advanced track is extremely difficult.

What About Electives?

As educators adopt core requirements, they often use that occasion to "clean up the curriculum," stripping out what they consider the least-valuable electives. For example, when Pinellas County, Fla., educators raised their core requirements in language arts to four years, they decreed that "elective-type" courses should not count for meeting the new requirement. Overall, Pinellas County schools purged more than 30 courses that were not considered substantial enough to deserve high school time.

Some other administrators admitted they were having difficulty in trying to resolve the question of adopting a core curriculum and, at the same time, preserving "enough" electives. Said one superintendent: "It's frustrating. The core curriculum is desirable, although requiring four years of English, three years of math and science, and other core subjects would make it difficult to save electives."

A New Mexico administrator added emphatically: "We must carefully guard the arts from the basic skills fanatics."

Updating Teachers and Facilities

School districts that stiffen academic requirements by adding more math and science courses may run into teacher shortages and the need for updated, better equipped facilities.

In Florida, state money was appropriated to help districts take care of both concerns.

New Florida legislation required 22 credits for high school graduation in 1985, going up to 24 in 1987. These credits must include four English courses (literature and composition), three years of mathematics and science, and credits in several other subjects.

Anticipating a serious teacher shortage, the legislature appropriated $9.6 million for math and science institutes held all over the state during one summer. Teachers from every district had an opportunity to participate. Student loans and scholarships and tuition courses were also made available to train new teachers for shortage areas.

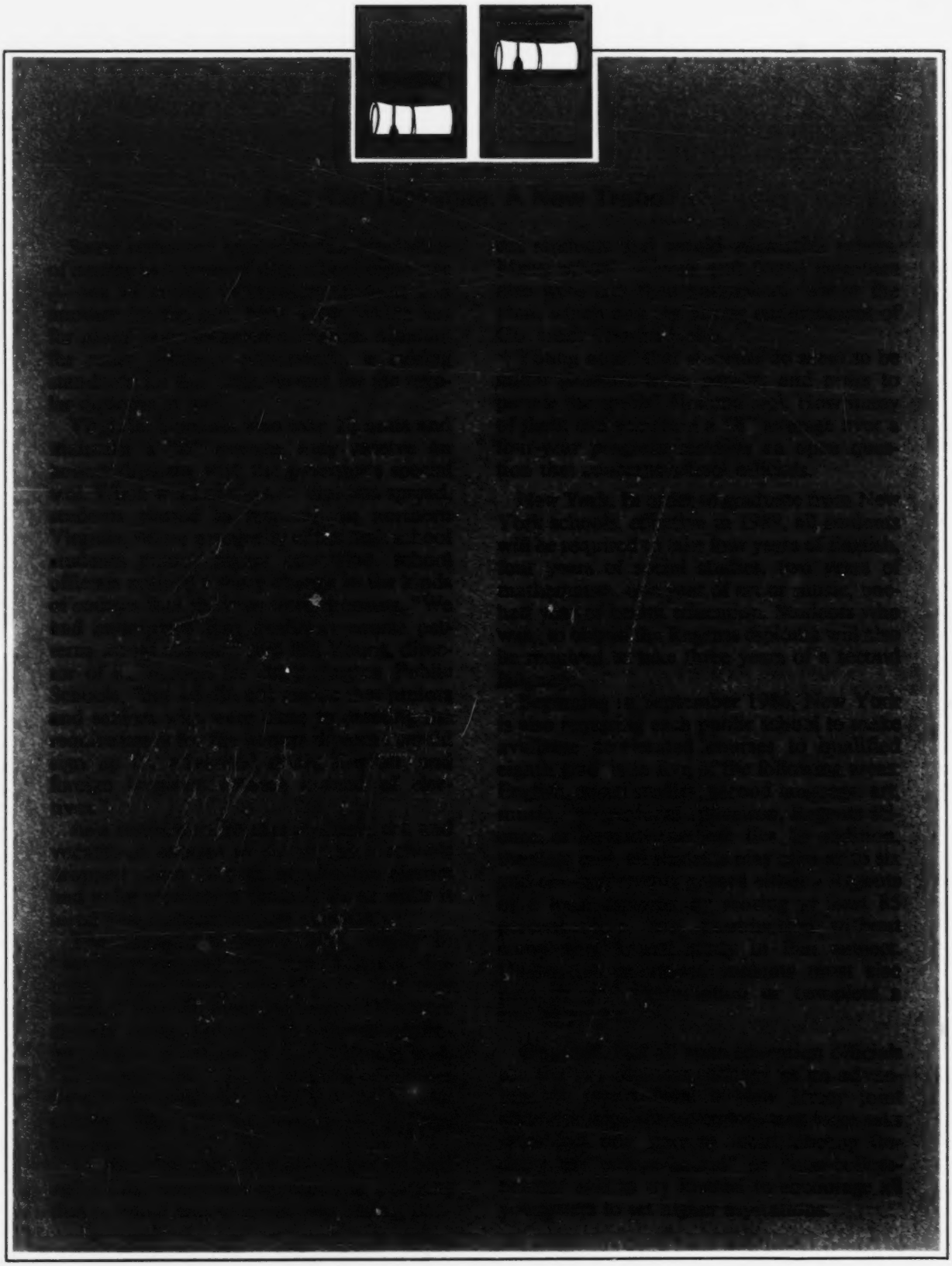
The legislature's demand for more laboratory courses in math, science, and computer education was accompanied by an appropriation for building new laboratory facilities and for buying high-cost equipment.

Adjusting the Curriculum

In adopting a core curriculum or a set of specific competencies that students must meet, a district will need to scrutinize its program and how well it is succeeding with the students served.

The impetus for taking a close look at the curriculum often comes from the state level. In Florida, for example, the state education agency developed "curricular frameworks" to define what sort of courses would be acceptable for meeting core requirements. The frameworks suggest alternative types of courses — about 40 for science, for example — and only courses like those outlined count toward meeting state requirements.

Robert Lumsden, program administrator for math, science, and computer education at the



state agency, explained: "Science courses had proliferated at the local level. These were courses that had some science but were not part of the traditional science program — photography, cosmetology, health, ROTC, and aeronautics, and the like. These courses won't be accepted for science credit now. Some were good courses, but that is one of the trade-offs for a uniform agreement."

Administrators at the local level may have to decide where they stand with regard to "balancing" the curriculum. This phrase is cropping up among those who fear that the push toward stringent requirements may be going too far.

"There is more than one way to have a demanding program," noted Jim Monasmith of Colville (Wash.) High School. "It can be demanding in music or art or agriculture as well as in the core. You keep up standards and expect more."

Monasmith's district, which serves 450 students in a rural part of Washington state, requires three years of English and two each of math and science for non-college-bound students who enter the high school in their sophomore year.

The high school maintains standards in part by insisting that secondary school students do secondary-level work. No credit is given for remediation. Students must pass competency tests in English and mathematics to enter high school. They must also be able to write a two-page essay with no more than two mistakes.

Monasmith encourages non-college-bound students to go beyond the two-year math and science requirements, and about 40 percent do so, moving into algebra their junior year. They must also complete an English class where they write 10 essays a year.

Tips

Administrators interviewed for this report offered their peers a laundry list of "things to watch out for" in moving toward implementation of a core curriculum:

Electives

Students may have serious difficulty scheduling electives that they feel are important. Many districts surveyed by AASA said that they either had to change their scheduling or lengthen the school day to allow students to squeeze in vocational and arts courses. The Maryville (Mo.) Schools used this approach, dividing the six-period day into seven periods when graduation requirements were raised from 21 to 24 credits.

At Rantoul (Ill.) High School, administrators changed their time schedule so that music students and others could take five academic classes each year without giving up electives. If changes like these are sufficiently funded, the transition can be fairly smooth. If not, problems can result, particularly in areas where workloads are written into teachers' contracts and unions are strong.

Another concern: Teaching staffs may be thrown out of balance temporarily, as students take more core subjects and less vocational education, fine arts, or physical education.

Curricula

Districts may have to develop new curricula, particularly for the middle-range students. A task force of the Association for Supervision and Curriculum Development noted: If these youngsters move into the regular advanced mathematics and science courses for college preparatory students, the subject matter may have to be watered down. If it is not diluted, many of these middle-range students will probably become frustrated and drop out, the task force warned.

If new curriculum materials are produced, teachers may have to be trained to use them. Administrators may wish to review local textbook selection procedures and, if teachers are not given a role in the process, consider including them. Administrators must also be aware of the fact that curriculum reform will not work unless teachers are committed to the new material. Too often, curriculum plans never get off the shelf.

In Broward County, Fla., math supervisor Larry Wantuck relies on a testing program to guarantee teacher accountability for new curricula. The district has developed uniform chapter tests, mid-terms, and final examinations that will monitor student performance districtwide and will also reveal whether curriculum coverage and continuity are being carried out in county schools.

Ability Grouping

Administrators may have to deal carefully and sensitively with ability grouping or tracking. They should note that tracking, in itself, is not illegal. As noted by Thomas A. Shannon, executive director of the National School Boards Association in *School Board News* (September 1983), tracking can be purified to assure that it passes legal muster. However, two conditions must be

met: (1) There must be no possibility that assignment to a track — or retention in it — is based on anything other than strict objective criteria related to intellectual prowess and academic achievement. That is, sex, ethnic background, or race must not be a factor. (2) The track system must be flexible enough to permit students to move from one track to another. Counselors should make sure that students from backgrounds that do not encourage achievement are urged to take advantage of academic opportunities.

Dropouts; Voc Ed Students

Administrators must be aware of the implications of new requirements for students who are on the edge of dropping out and those who are enrolled in vocational education courses.

The major reform documents assume that the most pressing needs for students destined for the workplace are the academic skills that can be learned in core subjects.

One pertinent report, *Education for Tomorrow's Jobs,* makes specific recommendations for vocational education. It suggests that fundamental English and mathematics courses be taught in conjunction with vocational courses, so that students see how academic skills relate to job skills. The report was prepared for the U.S. Department of Education by the National Research Council (National Academy Press, 2101 Constitution Ave., N.W., Washington, D.C. 20418; $10.50).

Some vocational schools now practice this kind of instruction. One example: The Ocean County Vocational-Technical School, Toms River, N.J., teaches related math, English, and science in all trade and technical areas.

For more recommendations on vocational education and dropouts, see the chapter on Equity.

What Accounts for Score Declines of High School Seniors?

Students who graduated from high school in 1980 — and the schools they attended — were quite different from their counterparts in 1972, according to researchers at the Educational Testing Service (ETS).

Some of these differences, the researchers said, account for the test score declines of these students in vocabulary, reading, and mathematics.

Curriculum Track

	1972 Seniors	1980 Seniors
Academic	45.7%	38.1%
General/ Vocational	31.8%	37.2%

Number of Courses Taken

	1972 Seniors	1980 Seniors
Social Science	5.21 semesters	4.64 semesters
Science	3.71 semesters	3.46 semesters
Foreign Language	2.64 semesters	1.65 semesters
Mathematics	3.93 semesters	4.06 semesters

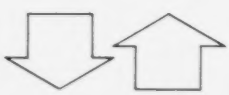
Note: In 1972, coursework information was obtained from students' schools. In 1980, students supplied this information.

Homework
Less than Five Hours Weekly

	1972 Seniors	1980 Seniors
General/ Vocational	74.3%	85.1%
Academic	53.9%	59.3%

Aspirations

	1972 Seniors	1980 Seniors
4 or more years of college	50.6%	45.5%
Junior college or voc-tech education	30.6%	34.8%
Professional occupation at age 30	45%	43.4%



Up in 1980

- ✔ Seniors' participation in non-academically oriented, extracurricular activities.
- ✔ Seniors' ratings of library facilities.
- ✔ Seniors' ratings of teachers' interest in students.
- ✔ Seniors' concern about the lack of academic emphasis in their schools.
- ✔ Proportion of schools with dropout rates of 20% or more.

Down in 1980

- ✔ Participation in activities that could provide nonformal learning.
- ✔ Seniors' ratings of their schools' reputation.
- ✔ Seniors' ratings of their schools' quality of instruction.
- ✔ Seniors' ratings of their schools' condition.

Just as many of the nation's high schools are trying to do something about higher academic standards, so too are many colleges and universities.

College officials recognize that they have played a part in lower student achievement at the pre-college level, which has, in turn, brought forth demands for higher standards at both levels.

Many colleges, after all, dropped their admissions requirements when student unrest and demands for "relevance" led them to abdicate their traditional role of standard-setter for the secondary schools. Their actions made it much harder for high school officials to enforce high standards and to persuade students to take tough college preparatory classes.

The real problem, many experts agree, is that many high schools and colleges lost track of each other. Often, high school course content no longer left off where college freshman classes began. There was little consensus about what high school graduates should be able to do if they meant to attend college.

Surge in Remedial Courses

For all too many high school graduates, the first year of college is a time of shock. When they arrive on campus, they sometimes realize they are just not ready for the demands of freshman courses. Many end up in remedial mathematics, composition, and even reading courses.

In the early 1980s, remedial courses constituted the fastest-growing area of the college curriculum. The problem is particularly acute in mathematics. Between 1975 and 1980, according to *A Nation at Risk*, remedial mathematics courses in public four-year colleges increased by 72 percent. By 1983, they constituted one-fourth of all the mathematics courses taught at those institutions.

Consequences: Many experts see a clear connection between the surge in remedial college enrollments and the lack of stiff graduation requirements at the high school level. Once high school core demands were dropped, they say, students gravitated out of the college preparatory curriculum and into "cafeteria-style" electives that whetted their interests, not their intellects.

In the 1983-84 school year, 25 percent of first-year students were enrolled in remedial math courses, according to the National Center for Education Statistics (NCES). In addition, it said, 21 percent of the freshmen were enrolled in remedial writing, and 16 percent in remedial reading.

Sixty-three percent of all colleges surveyed by the federal agency reported enrollment increases of 10 percent or more in remedial courses.

Switch to General Courses: An analysis of 8,800 high school transcripts by researchers at the National Institute of Education for the National Commission on Excellence showed that the proportion of students in academic or college preparatory programs declined by 25 percent in the 1970s, while the percentage in less-demanding general track courses more than tripled to about 42 percent.

High School and Beyond: A National Longitudinal Study for the 1980s, a report from NCES, confirms this trend and points out that the dimensions of the problem vary in different parts of the country. Far more students in the West and the Middle West than in the Northeast opt for the general track. Overall, this study found that only 34 percent of the 1980 seniors in public high schools were on a college preparatory track, although roughly half of them were likely to pursue at least one year of postsecondary education.

College-Bound, But Unprepared

Higher education, once reserved for the academically elite, is now a crucial part of the American dream for millions of high school graduates. But at the same time, many students and their parents do not really seem to understand how to go about laying the groundwork for college during their high school years. Many students simply have not been preparing themselves with the skills that higher education demands.

The most serious shortcomings shown by would-be collegians involve advanced mathematics and English composition skills.

Less demanding coursework: There are problems with the content of high school coursework as well. Since 1971, Stanford University has sent out a "Memorandum to Secondary Schools, Students, and Parents," which lists some of the most serious areas of concern.

The university, the document explains, no longer can depend on the amount or quality of work represented by a high school grade point average or even class rank. Many applicants to the school have taken no high school foreign language; too many have no experience with essay exams; and too often, course titles do not represent the subject matter covered in high school.

"We are no longer as confident as we once were that an English course, is, in fact, an English course, and not simply a course devoted to another policy question," states the memorandum.

Many students obviously have not been encouraged by counselors to take tough, demanding high school courses—and many college admissions officers weigh this factor heavily, admitting students who have tried to learn the most from the particular program of studies their school offers.

In some districts, counselors are the first to be dropped in a budget crunch. In others, they are busy dealing with students' personal problems and other crisis-related tasks.

"In some of even the best funded schools, counselors have been schedule-fixers more than program advocates, and the function of encouraging students to take a challenging program, where such a function exists at all, is too dispersed and too happenstance to have more than a minimal effect," explained Fred Hargadon, former dean of admissions at Stanford.

Action at the College Level

Many colleges have clearly grown tired of the strain that remedial courses place on their budgets. The magnitude of the problem in California, for example, led that state's Postsecondary Education Commission in 1982 to rank improving incoming students' preparation and skills as the top priorities the group should address during the next five years. A state-level task force studying Virginia's public colleges suggested that remedial activities were sapping the integrity of the college curriculum in that state.

Some universities are making students pay for remedial classes, which are not counted as part of the regular credit program.

Many state universities have begun to place stiffer requirements on entering freshmen. At many four-year state universities, students must complete a college preparatory core curriculum.

Utah, for example, now requires four years of high school English (emphasizing writing), and it recommends other core studies.

The University of California demands that students complete 15 college prep credits, including algebra, geometry, laboratory sciences, and foreign language.

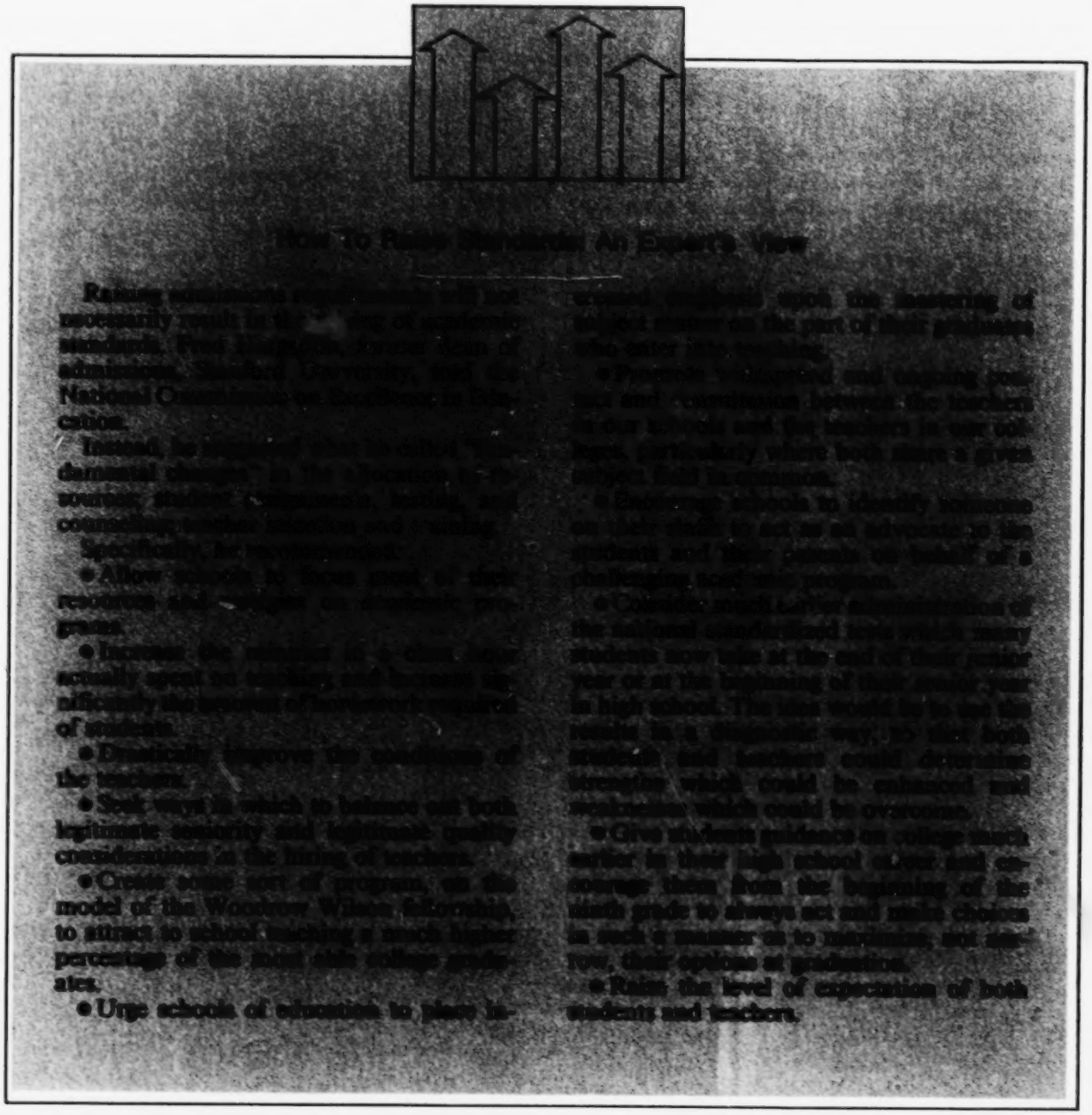
Florida State University entrants must have a 2.5 grade average and a score of 950 (combined) on the mathematics and English sections of the SAT.

The University of South Carolina raised its admissions requirements to four units of English, three of mathematics (including algebra and geometry), and three of social sciences. It also requires credits in foreign language and computer science.

The New Standards

Many state officials hope that new high school graduation requirements, combined with higher college admissions standards, will cause students who aspire to go on to college to realize the need for early, thorough academic preparation.

Many states have already spelled out specific curriculum requirements for a high school diploma. Florida, for example, set very stiff academic requirements: four years of high school language arts, and three years each of math, science, and social studies for the class of 1986-87. Rhode Island mandated that college preparatory students must complete two years of foreign language and a semester of computer literacy.



How to Raise Standards: An Expert's View

Many school districts, too, have taken steps to tighten requirements for college preparatory students, instituting a college preparatory curriculum where none was in place before or adding to former requirements. The Winona (Miss.) Public Schools, for example, require college-bound students to take four units of English, three of science (beginning with Biology I), and three of mathematics (beginning with Algebra I).

High schools in Oklahoma City, Okla., are establishing college-prep mini-schools, where students get more rigorous classwork. The classes are not strictly limited to youngsters who plan to go to college.

Helping Students Meet Standards

In several states, educators have been hard at work outlining the expected skills and competencies of students who can not only pass admissions tests but also succeed in their college courses.

Example #1: Wisconsin

The University of Wisconsin's High School-University Curriculum Liaison took a big step in this direction in 1979, when the group published *Preparation for College,* a booklet for high school students and their teachers and counselors. It describes the note-taking, mathematics, and other skills students coming to the university should possess. A large part of the booklet consists of examples of the types of work required in various courses at the university.

Here's an example of the advice the booklet offers:

> *"Students should plan ahead for courses they will be required to take. This is perhaps the most difficult expectation to explain to students as they prepare for college. When the student takes a course is as important as what course the student takes. It may seem at the time that advanced algebra or third-year German can be put off until the senior year without serious consequences. However, a lapse of one year in a 'skills' course can put the student at a serious disadvantage."*

Example #2: Ohio

In Ohio, a joint articulation commission appointed by the State Board of Education and the Ohio Board of Regents worked in tandem for three years to define in detail the kind of academic background high school students need for college.

The commission's *Report of the Task Forces on Science, Social Studies, Foreign Language, English, and Mathematics* spells out not only how many years of study students should have, but it recommends specific topics which should be covered in high school courses and skills that should be mastered.

With regard to writing skills, for example, the Ohio report says that entering freshmen should:

- Be able to write in an hour a clearly focused expository essay of about three pages which has a clearly defined thesis, clear and logical organization of ideas, supporting details drawn from experience, observation, and reading, and standard paragraphs and sentences.

- Be able to use standard marks of punctuation and standard spellings.

The booklet goes on to define the kind of language, grammar, sentence structure, paragraphing, writing organization, and reading skills that college freshmen should demonstrate.

Published in 1982, the booklet became available about the time Ohio colleges began raising admissions requirements. Some Ohio administrators have used it to review and develop curricula to help students meet the new standards.

Example #3: California

California offers another instance of high school-college curriculum articulation. A booklet called *A Statement of Competencies in English and Mathematics Expected of Entering Freshmen* provides perhaps the most detailed guide to competencies that should be considered in planning college preparatory curriculum. It was prepared by the academic senates of the California community colleges, the state university system, and the University of California. Its purpose: to help students and high schools get ready for higher college admissions standards.

The booklet advises students, for example, that they will be expected to write clearly in college. It lists the following skills as "fundamental for successful baccalaureate-level work":

1. The ability to generate ideas about which to write.
2. The ability to formulate a single statement that clearly expresses the central idea of one's essay.
3. The ability to construct a paragraph that develops and supports the paragraph's main ideas with examples or reasons.
4. The ability to organize paragraphs into a logical sequence so that the central idea of the essay is developed to a logical conclusion.
5. The ability to use varied sentence structures and types effectively in order to indicate the meaning, relationship, and the importance of ideas.
6. The ability to write sentences with precision and appropriate words, to distinguish between literal and figurative use of language, and to avoid inappropriate jargon and cliches.
7. The ability to vary one's choice of words and sentences for different audiences and purposes.
8. The ability to present one's own ideas as related to, but clearly distinguished from, the ideas of others, which includes the ability to use documentation and to avoid plagiarism.
9. The ability to support one's opinions and conclusions, including the appropriate use of evidence.
10. The ability to use dictionaries and other reference materials for the purpose of checking words and facts used in one's writing.

11. The ability to proofread one's essay for errors and omissions of both form and substance, to revise and restructure where ideas are poorly organized or where evidence is lacking, to correct the draft for errors in capitalization, spelling, and punctuation, and to produce a finished paper relatively free of sentence fragments, comma splices, agreement errors, and improper pronoun references.

The booklet gives numerous examples of written essays and how those essays would be graded by teachers at the community college, state college, and university level. Also included are pages of examples of problems in algebra, geometry, and trigonometry that students are expected to be able to solve.

The booklet is available for $2.50 per copy (plus sales tax for California residents) from California Department of Education, Publication Sales, P.O. Box 271, Sacramento, Calif. 95802.

Example #4: The Green Book

Probably the most comprehensive attempt to reach a general consensus on the groundwork for college preparatory education is the College Board's *Academic Preparation for College: What Students Need To Know and Be Able To Do* (informally called the "Green Book").

The booklet is the result of a nationwide effort in which secondary and college educators tried to agree on specific educational outcomes. While the 36-page booklet carefully states that its authors do not intend to describe (or dictate) high school curricula, or how learning should take place, the suggested outcomes do represent general goals for high school curricula.

Academic Preparation for College lists six vital academic subject areas (English, the arts, mathematics, science, social studies, and foreign language). It explains why students need this learning and also describes what students should be able to do as a result of their studies.

In science, for example, "college-bound students will need sufficient scientific knowledge to be aware of themselves as biological organisms in a physical world, to take advantage of career options requiring the study of science, and to function effectively as responsible citizens in a society increasingly shaped by science and technology. They will need not only to know about science but also to understand the fundamentals of how to carry out scientific work."

Recommendations emphasize central skills a student needs to study science successfully, rather than extensive content coverage in various fields. Five specific laboratory and fieldwork skills, six types of mathematics skills, and two fundamental concepts students should possess are then outlined. Detailed knowledge that students should master in biology, chemistry, and physics is briefly noted.

Academic competencies. Besides suggesting subject matter outcomes, *Academic Preparation for College* also describes six basic academic competencies that undergraduates should master. "Students are not born with the basic academic competencies," the booklet asserts. "They develop these competencies as a result of education and practice."

The academic competencies consist of broad intellectual skills—reading, writing, speaking and listening, mathematics, and studying—that cut across all disciplines. Without such competen-

cies, the booklet continues, knowledge of subject matter fields is unattainable. A brief section on computer competency is also included.

Uses: The booklet can be used in a number of ways. Some examples:

- As a tool for opening dialogue with college personnel that makes for clearer understanding of mutual goals. School administrators might identify 5 or 10 colleges that students from their district are likely to attend, and then sit down with the academic deans of those colleges, using the booklet as a basis for defining what college personnel really expect from high school graduates, especially if there are new requirements. Curriculum can be built on the basis of these discussions.

- To help with district curriculum planning and assessment activities in the six subject areas. College Board staff say school districts can shape curriculum assessment activities around the list of general competencies, starting schoolwide curriculum dialogues that include personnel from various departments, since the academic competencies cut across discipline areas. To illustrate: All department heads might use the booklet to discuss how reasoning or writing skills might be taught throughout the curriculum.

- To help administrators assess whether teachers need inservice training that would enable them to teach the academic competencies and skills. "Some teachers, particularly in math and science, have not been back for training in their subject matter fields for years," noted the College Board's Henry Harper.

Here's how the booklet has been used in some areas:

In Oregon, the Joint Committee on High School-College Connection recommended that the statements in the booklet be used in establishing the courses and course content necessary for success in college.

In New Jersey, the Statewide Task Force on Pre-College Preparation used the competencies in making recommendations for improving the English and math proficiencies of the state's high school students.

In North Dakota, the State Board of Higher Education adapted the basic competencies and the booklet's computer competency recommendations into a booklet, *Planning For Life, College, and Careers,* which was distributed to junior high school students throughout the state.

In New Haven, Conn., an effort is under way to incorporate the basic competencies into the subject areas. An inventory of each high school academic department revealed that the probabil-

ity and statistics aspects of the mathematics competency described in *Academic Preparation for College* were not being taught in the business education or math curriculum. They were then added to the economics and advanced math courses.

In Minot, N. Dak., the College Board booklet is used in counseling sessions with students, both those who intend to go to college and those who are going directly into the world of work. The booklet is also used with junior high school students and their parents at an open house held

Can Students Meet Foreign Language Requirements?

One area of the college preparatory curriculum which deserves special mention is foreign language study.

"Frankly, in secondary [school] language teaching, we have yet to reach [a level as high as] mediocrity," stated Ray Clifford, academic dean of the Defense Language Institute, in testimony before the National Commission on Excellence in Education.

The most critical element for learning a second language is time, experts say, and the two years of study that American high school students often devote to this pursuit simply are not sufficient.

Learning to read a language competently, Clifford stated, takes four to five years of sound study, and to speak it takes even longer. An analysis of the teaching of French as a second language in several European countries by the International Association for the Evaluation of Educational Achievement found that it took six to seven years of study to develop a useful competence in the language.

The second most important factor for teaching languages—teacher fluency—is also a major problem in many school districts.

Some states are beginning to take action on the foreign language front.

New York's Board of Regents adopted a sweeping plan that will require students to complete at least two years of foreign language study between kindergarten and ninth grade and to pass a proficiency test in that language for high school credit. Candidates for the Regents diploma would have to take at least two additional foreign language courses.

Louisiana school districts now must use 30 minutes daily to teach foreign languages to academically able students in grades 4-8 (less able students study basic skills), a move that has resulted in a longer school day in that state.

Rhode Island and Virginia both have mandated high school foreign language study for college-bound students.

Local districts also have moved to strengthen foreign language instruction. Some are introducing more language study into elementary or junior high curricula. The Wooster (Ohio) City Schools offer a five-year foreign language program, with the fifth year devoted to reading, writing, and research.

At the high school level, some districts are fleshing out the language study curriculum with classes in less-commonly taught languages. Philadelphia's selective High School of Engineering and Science offers Chinese, and two high schools in Salem, Oreg., offer Japanese; another offers Russian.

Many districts report seeing more interest in foreign languages among their students. Language enrollments at Niskayuna Central School District, Schenectady, N.Y., have risen to about 75 percent of the student body, according to Francis R. Taormina, assistant superintendent.

Finding teachers for new classes will probably pose problems for some districts. Many reports have pointed to the language deficiencies of college language program graduates. If they become teachers, they will pass their incompetence on to their students. Thus, raising elementary and secondary school language requirements may require changes in the way that colleges prepare their students and in teacher certification measures as well.

at the high school. The district presents the high school curriculum in terms of the booklet, and emphasizes the need for planning for students with college goals in mind.

Getting Students To Aim Higher

What else can districts do to encourage students to aim higher? Descriptions of three approaches (testing, counseling, advanced courses) follow:

Approach #1: Testing

Achievement tests that measure students' attainment of specific skills should be allowed to "drive" high school college preparatory curricula toward specific goals, argue some experts. Test makers, however, are reluctant to endorse use of existing tests in this way, if the tests were not developed and validated for this purpose.

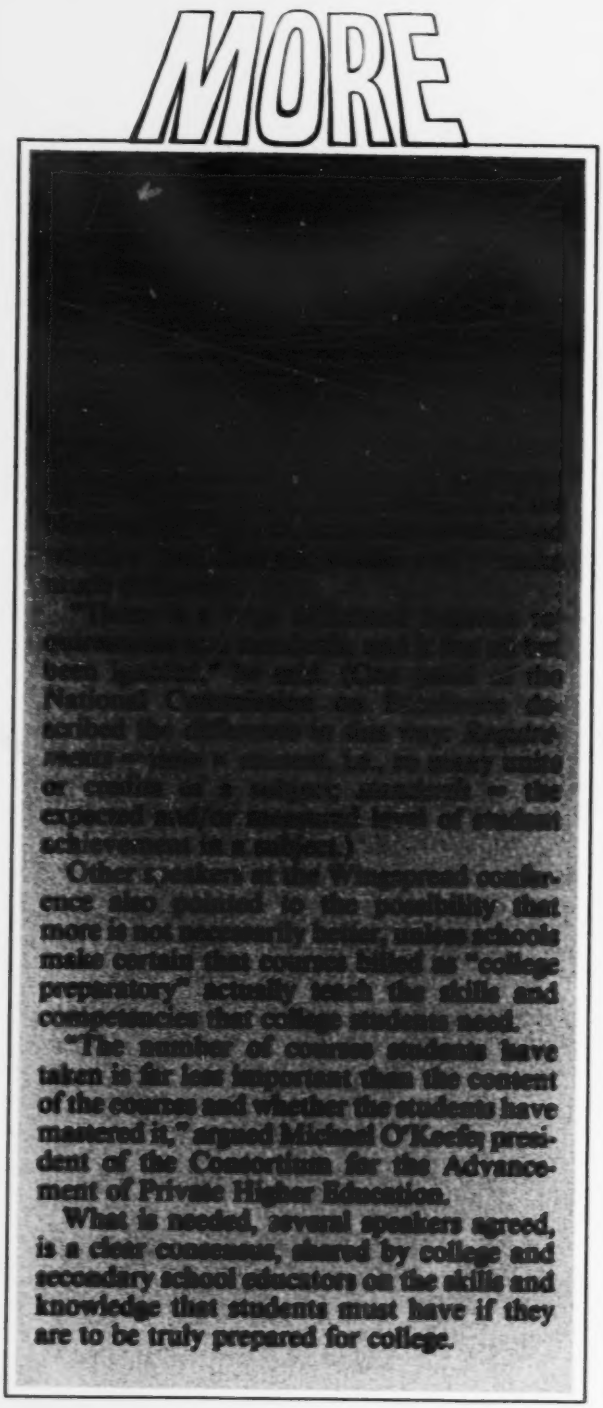
Nevertheless, tests that expose students' weaknesses in college preparatory subjects do serve a purpose. They help students realize they have problems—while there is still a chance to correct them in high school.

To illustrate: The Ohio State Board of Regents developed a college placement-style test that is administered to juniors in roughly two-thirds of the state's high schools. Test results show students where they would be placed in college mathematics if they entered with their current skill levels.

The test is encouraging demand for senior-year high school mathematics courses, according to Elaine Hairston of the State Board of Regents. "Students need senior math because they lose retention otherwise," she noted. "The marginal students especially need it."

For students who are not up to calculus and trigonometry, many Ohio high schools offer a numerically-based problem-solving course that covers the type of work given in remedial college mathematics courses, but takes the material at a slower pace.

The Ohio Board of Regents uses a similar approach to encourage high school students to take more composition. At 10 sites in the state, teachers of high school composition and college freshman writing courses work together analyzing high school students' writing samples. The compositions are returned to the students with the college teachers' comments. "This definitely encourages the demand for composition at the high school level," Hairston said.



Approach #2: Counseling

The responsibility for keeping students informed about how changes in college admissions requirements are likely to affect them falls on

secondary school counselors and administrators. School officials must be aware of new college standards and be ready to explain them to students and parents.

Some colleges have also taken an active role in student advisement. Two examples follow:

Faculty at the College of Arts and Sciences at Oklahoma State University in Stillwater made up a checklist of high school courses that professors there felt students interested in their fields should take.

The college also sends "competencies teams" to nearby school districts to help administrators plan ways to prepare students for college. The teams use *Academic Preparation for College* in these discussions and usually take along speakers, who tell students why skills are important.

Ideally, Bob Graalman, project director, likes to take along a scientist, for example, to explain why basic competencies are important. "We're trying to illustrate that a person well skilled in basic competencies—writing, reasoning, speaking, and reading—will do well regardless of the field he finally chooses. We illustrate the interrelationship of all kinds of knowledge."

The University of California took a different tack toward new higher admissions requirements. College officials sent a letter to warn parents of eighth graders of the changes.

The letter stressed the importance of choosing the right courses. It advised:

- Students should take an English class (requiring written composition) every semester of every year.
- Students should take a mathematics class every semester for at least three years, including both semesters of the junior year.
- Students interested in medicine, the sciences, or engineering should take a full year of chemistry, biology, and physics, and as many mathematics courses as possible.
- Students should take courses in history and social sciences and at least two years of a foreign language.

Approach #3: Accelerated Courses

The Advanced Placement (AP) program has been an open avenue for college-school cooperation for many years. The program has, in fact, grown during the past decade.

What began in 1955 as a program for the brightest students at a handful of private schools has become a standby of the college preparatory curriculum at more than one-quarter of the secondary schools across the nation.

"If students 'don't know what they don't know,' parents are even more deprived."

—Unidentified witness before the National Commission on Excellence in Education.

In 1984, 177,406 high school students from 6,273 schools took college-level courses and accompanying AP exams, almost triple the 60,863 high school students who participated in 1974.

Some 70% of students who took AP exams in 1984 earned college credit.

Participation for some groups is going up. The percentage of women taking the exams increased from about 40 percent in 1969 to 48 percent in 1984. The largest increase was shown in women taking math exams.

The percentage of minority students increased, rising from 11 percent in 1979 to 15 percent in 1984.

Many authorities see the AP program as a way to add rigor and challenge to flaccid high school curricula at a time when college admissions standards are rising. It now offers examinations in 13 fields: art, biology, chemistry, computer science, English, French, German, history, Latin, mathematics, music, physics, and Spanish. School districts have considerable leeway in planning the courses.

How does a district start AP courses?

When the Solanco School District in rural Quarryville, Pa., adopted AP classes in English and American history, its regularly certified teachers were ready to instruct the classes after a one-day workshop given by AP program staff.

"It costs about one-sixth of a teacher's time, or one period of the day, and the price of the books," said Carl Beck, assistant to the superintendent in Quarryville.

Students at the high school pay $44 for their examinations, and many don't take the formal exams at all. If they do well on achievement tests at Pennsylvania State University and some other area colleges because of the advanced

coursework, they do not have to take introductory courses.

The International Baccalaureate program offers another way for schools to challenge able students. This program was launched in 1958 in Geneva, Switzerland, when educators from several countries worked out a program for high school study that would satisfy different countries' requirements for college entrance.

Students take the program during their junior and senior years. Courses are grouped in six subject areas, with a syllabus and examination for each subject. Students must pass exams in all six courses—mathematics, social studies, experimental science, foreign language, English, and an elective—if they are to receive the diploma. In addition, they must write an essay and complete a seventh course called "Theory of Knowledge."

The International Baccalaureate is expensive. Examinations cost between $125 and $300 per subject, and each school must pay a fee ranging from $3,000 to $10,000 per year to join the program.

In another advanced credit program, this one sponsored by Syracuse University, high school and college teachers work together to draw up high school courses that count toward college credit. Secondary school teachers participating in the university's Project Advance are named adjunct professors of the college and take a brief period of intensive training to teach the accelerated courses.

High schools in four states have participated in the program. Their students earn credit at Syracuse for the special classes, which are also accepted by many—but not all—colleges.

Not everyone favors these courses. Some critics argue that programs like the one at Syracuse can weaken the value of the baccalaureate degree by lowering standards for entry into high-level college courses. There are studies that indicate, however, that students in accelerated courses end up with better college marks than their fellow students. On the plus side, the programs do tend to motivate bright youngsters who might grow bored in regular classes. Another plus: These programs can give teachers a greater sense of professionalism and status.

Do American schools demand too little from students? If they expected more, would that make a real difference in terms of achievement?

In the picture that emerges from the recent reform reports, American public schools are places where teachers often demand little from their students, and students oblige by putting too little effort into their work. Consequently, too often, achievement is poor.

What the Research Says

A sizable body of research indicates that if American schools did demand more from students, their achievement *would* indeed improve. One of the most consistent findings to emerge from school effectiveness research is that expectations do make a difference.

"Effective schools not only stress educational goals; they clearly communicate the expectation that all students will reach these goals," declared a *Research Action Brief*, published by the ERIC Clearinghouse on Educational Management. "This climate of high expectations is so persuasive in effective schools that it is scarcely noticed by the schools' staff or students." Furthermore, the research brief continued, the force with which the goals are expressed may be more important than the goals themselves.

Such conclusions are seconded in *Teacher Evaluation Standards and Student Effort*, a book by Gary Natriello and Stanford M. Dornbusch. It details results of three Stanford University studies based on observing over 2,500 students and classroom teachers.

The researchers found enormous differences in the demand structure of individual classes. They concluded that poor student effort is, in large part, a direct reflection of teacher failures to set standards.

"The only negative effect of high standards is found among low-achievement students who are often lost and discouraged in the classroom and need more help," Dornbusch said. "Low standards have negative effects on *all* levels of students."

How To Express Expectations

In attempting to reach for excellence, many school districts are trying to raise expectations and to communicate these demands clearly and forcefully to students.

David P. Gardner, chairman of the National Commission on Excellence in Education and president of the University of California, has spelled out some of the ways that these expectations can be expressed tangibly:

- By grades, which reflect the degree to which students demonstrate how well they understand what they are studying.
- By graduation requirements that tell students which subjects are most important.
- By examinations, which signal to students what is expected of them if they are to earn a diploma or a degree.
- By college admissions requirements.
- By the level of difficulty that textbooks and other reading materials present.

Another view comes from the California Task Force on Standards for Effective Schools. It said that high expectations are evident in the policies of a school and in the behavior of students and teachers and, perhaps, less tangibly, in the responsibility one senses all of those in the school

setting have for their schools.

Examples of tangible expectations, the task force said, include:

- The setting of goals that call for higher levels of student achievement.
- Rigorous grading and graduation requirements.
- Regular homework assignments (and demands for quality homework).
- Selection of textbooks that have appropriate reading levels for the grades in which they are going to be used.

Getting expectations across to staff and students. Many of the signs of high expectations are, first of all, the direct result of policies set by boards of education and second, of the amount of determination that district administrators bring to the task of enforcing the policies.

If a district stresses the value of learning, the point will reach students and affect them. On the other hand, if nothing is done about problems such as grade inflation, promotion based on factors other than performance, and laissez-faire attitudes toward attendance, course requirements, and homework, that too sends a message to students.

District Approaches

Here are some of the ways districts are attempting to raise the expectations of school staff, students, and parents:

Raising Expectations By Setting Goals

San Antonio: A Five-Year Plan. At the Alamo Heights Independent School District, San Antonio, Tex., school officials are raising expectations with a five-year plan for academic progress that sets goals in terms of higher student test scores.

The district's overall goals are the following:

- To improve the level of academic performance of all students.
- To assure that every student achieves minimum competency in basic skills.
- To challenge the capacities of college-bound students.
- To expect academically talented students to take advantage of Advance Placement courses in high school.

In Alamo Heights, student test scores have generally been good, with most of them in the top two quarters nationally on standardized tests. Nevertheless, the district intends to raise those scores slightly each year over a five-year period. District officials predict, for example, that the percentage of seventh-grade students scoring in the top quartile on a basic skills comprehensive test will rise from 48 percent to 50 percent; that those in the second quartile will go from 24 percent to 30 percent; and that those in the bottom fourth will decrease from 9 percent to 5 percent.

For older students, the district anticipates that by the end of the 1987-88 school year, the mean five-year scores of seniors in the top 10 percent of the class will exceed those of the same student group nationwide by 50 points on the mathematics and verbal sections of the Scholastic Aptitude Test.

The district hopes to reach those goals through steps such as regular reassessment and articulation of curriculum, adding a seventh-grade reading course (in addition to language arts), adding an eighth-grade reading course, providing a wide array of remedial services, setting up a junior high writing laboratory, regularly testing students for diagnostic purposes, enforcing attendance rules, adding foreign language programs, teaching vocabulary through twelfth grade, refining graduation requirements, and sharply increasing the number of Advanced Placement courses offered.

Raising Expectations Through Grading Practices

Billings, Mont., eliminates "grades for effort." The Lockwood elementary and intermediate schools in Billings instituted a new grading system that eliminates "grades for effort" in academic courses. It also does not allow teachers to give higher than a "C" to any student performing below grade level in reading and math.

Student report cards explain the new policy to parents, and a form which goes home with the students warns parents if their youngsters are falling behind. It tells them how they can help with reading and math and advises them to set aside one hour each night to read with their children and/or help them with homework.

Bristol, Pa., encourages students to take tough courses with weighted grades. A tough problem for districts is getting students to take hard courses, if, by doing so, they risk the chance to be

on the honor roll or other honors or scholarships.

The Bristol (Pa.) Borough School District came up with an answer to this dilemma.

Ten district secondary teachers and five elementary teachers met over the summer of 1983 to discuss the pros and cons of the issue. They decided that weighted grades would encourage students to take courses appropriate for their abilities, rather than settling for easier ones.

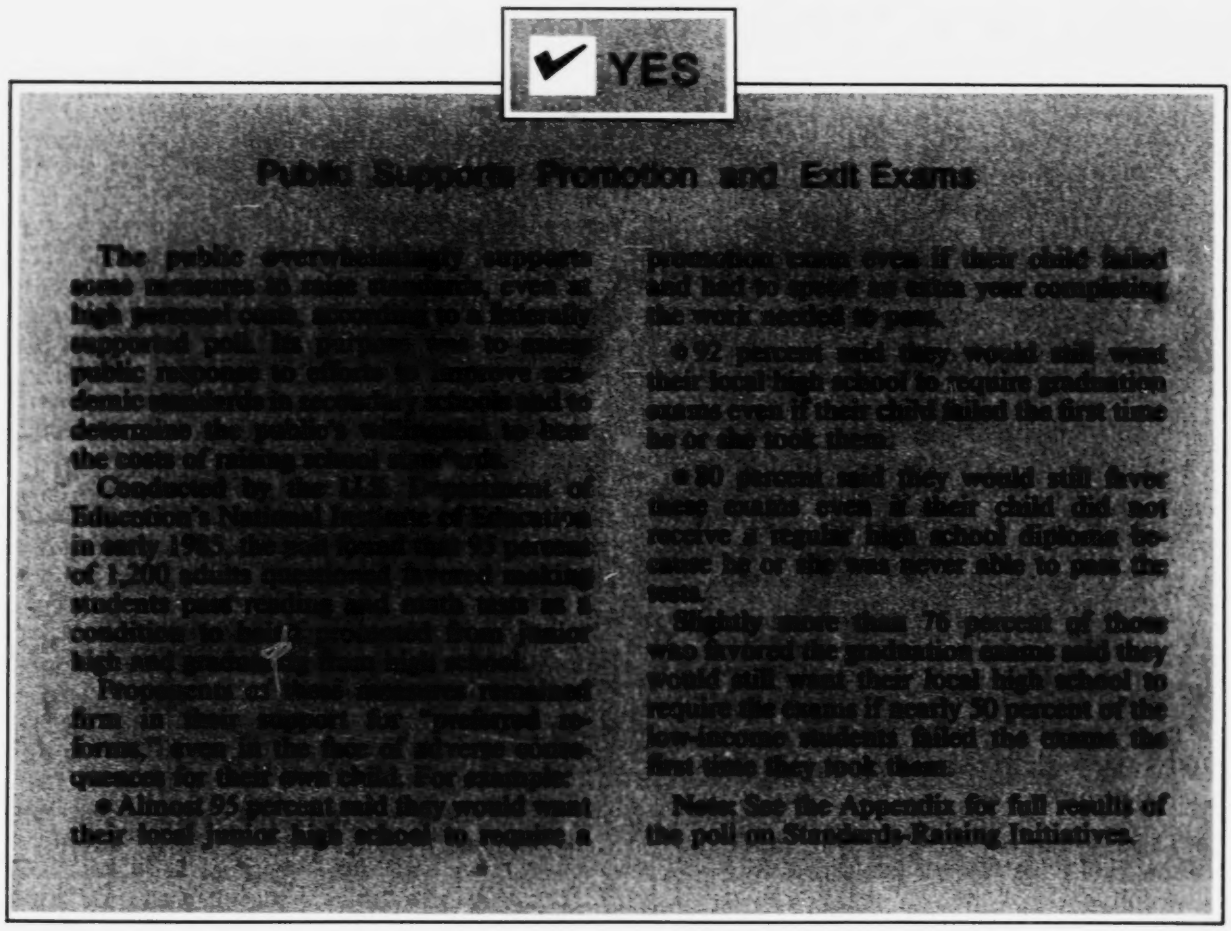
Specifically, the teachers recommended that grading should stay the same in elementary schools (although the honor roll should be weighted to allow more credit for harder courses). For grades 7-12, they recommended that weighted marks should be given in all courses.

Lima, Ohio, lures students *and* parents with weighted grades and Advanced Placement courses. Administrators enlisted parents to spur enrollments in Advanced Placement (AP) courses. "The community did not really have a good understanding of the importance of the program or how it could save money on college tuition," explained Roger Miller, principal of Lima Senior High School.

Consequently, the district started a "Quest for Excellence" drive that significantly increased the number of seniors who met the course requirements proposed in *A Nation at Risk*.

Counselors at the high school personally contacted parents of students who might profit from AP courses and invited them to a meeting where the "Quest" was launched with considerable fanfare. This contributed to its success, Miller said.

At the first parent meeting, a student athlete (who also had outstanding grades) circled the room with a torch to symbolize that academics, as well as sports, could be a worthwhile quest. Then Miller explained how AP courses could help students save time in college and how the school system's grades would, in the future, be



weighted so that students taking tough courseloads would get recognition for their effort.

Lima's honors courses count as 1.25 credits toward the grade point average while regular courses carry 1.0 credit.

Parents were impressed, and enrollment in advanced courses began climbing. Other students at Lima High were also encouraged to excel. Teachers started enforcing a stricter attendance policy. As a result, overall attendance at the school increased, and enrollments in mathematics and foreign language classes more than doubled in one year.

For more information, contact Miller at the Lima School District, 515 S. Calumet Ave., Lima, Ohio 45804.

Other alternatives: counseling; student contracts. Joseph P. Robitaille, superintendent of the Falls Village (Conn.) Regional School District, prefers to use counseling to steer students toward harder courses. "If the demanding courses are well taught, the students will accept the challenge," he asserted.

Along with counseling, the Creston (Wash.) School District uses student contracts to help youngsters chart school paths. Incoming freshmen sign an "individual academic program," drawn up at a conference where the school principal, a student, and his parents agree on a four year sequence of courses. During the conference, the principal explains options that are available to the student and makes recommendations based on the student's academic record and goals.

Raising Expectations By Honoring Excellence

If students work hard to achieve, they should win recognition for it. That is the belief of many administrators who said in their responses to the Critical Issues survey for this report that their districts have started giving outstanding students the kind of acclaim that athletes have long received. Here are some of the methods they reported:

The Kings Mountain (N.C.) School District patterns its academic awards banquet each spring after its sports banquet.

The Walker (Mo.) School District holds an awards night to recognize top students in a specific subject area.

The San Antonio (Tex.) Schools honor thousands of students (for grades and attendance) at an Annual Achievement and Improvement Day.

Academic competitions are making a comeback in some parts of the country, too. Many districts are participating in the President's Academic Fitness Awards program—a major nationwide project conducted under the auspices of the U.S. Department of Education and modeled after an earlier national physical fitness and sports awards program.

The program was initiated in 1984 to encourage and motivate high school students to pursue a solid core of academic courses and to strive to reach their full academic potential.

More than 229,000 graduating seniors from 10,000 public and private schools received the Presidential awards in the pilot year.

In 1985, the program was expanded to include students exiting from elementary schools and middle or junior high schools.

To receive an award, students must meet the minimum criteria established by the Department of Education. Students at each exit grade level must have:

- Attained a B+ grade average, accumulated in either elementary school, or middle or junior high, or senior high school, and including the first semester of the exit grade at this level. B+ is defined as 3.3 on a 4-point scale or 85 on a scale of 100.
- Received a recent score placing the student at the 80th percentile on any nationally recognized standardized achievement test battery. For the senior high award, this test may include a nationally standardized college admissions examination such as SAT or ACT.

For the high school award, students also must have completed by graduation at least 12 high school or higher level units in the "New Basics," defined by the National Commission on Excellence in Education to include English, mathematics, science, social studies, foreign language, and computer science.

Note: The Department contacts school principals and superintendents outlining the procedures for the program and inviting their participation. Principals must obtain approval from their superintendent, school board, or governing body and notify the Department by early spring of the number of students selected for awards.

Academic Decathlon: Each year, students from a growing number of high schools in several states compete in the "Academic Decathlon," an international competition started several years

ago in Orange County, Calif. (For more information, contact Robert Peterson, Orange County Department of Education, 200 Kalmus Dr., Costa Mesa, Calif. 92627.)

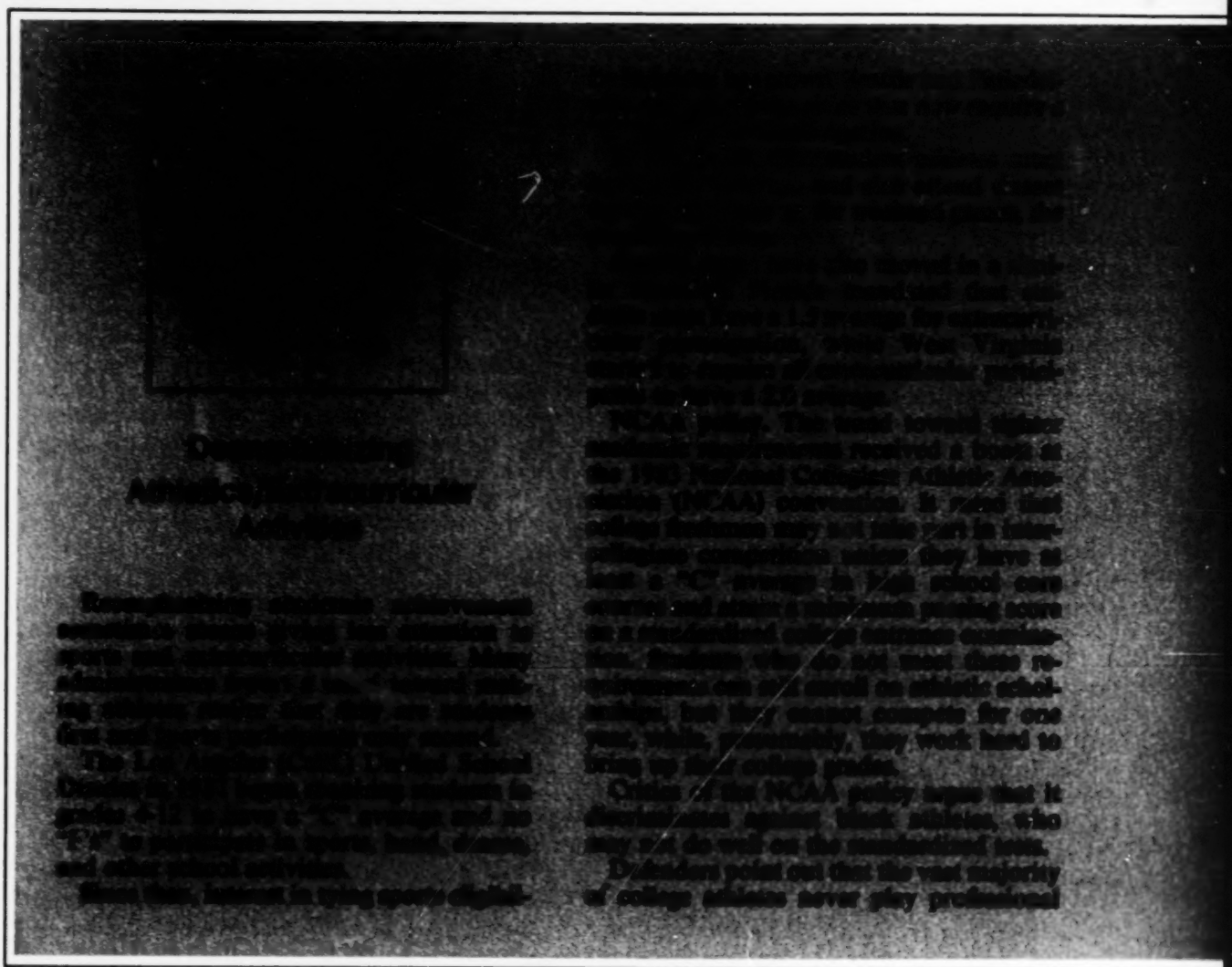
In Berlin, N.H., the schools encourage academic competition through an "Olympics of the Mind" week.

In Upsala, Minn., schools are fielding "Knowledge Bowl" teams. Sophomore, junior, and senior classes compete for an academic trophy. During each grading period, the winning class is determined by a formula for calculating grade point averages for the class as a whole and the average number of days absent.

In Cashmere, Wash., school officials have instituted an academic extracurricular program that encourages students to "learn and perform" more on their own initiative. Participating students are assigned a "mentor" who guides them. They receive recognition for what they achieve in the extracurricular program.

In Duval County (Jacksonville), Fla., a special club has been founded to honor and encourage sophomores who are potential National Merit Scholars.

Many states have started awards programs for outstanding scholars, and more states are also giving scholarships. During the 1983-84 school



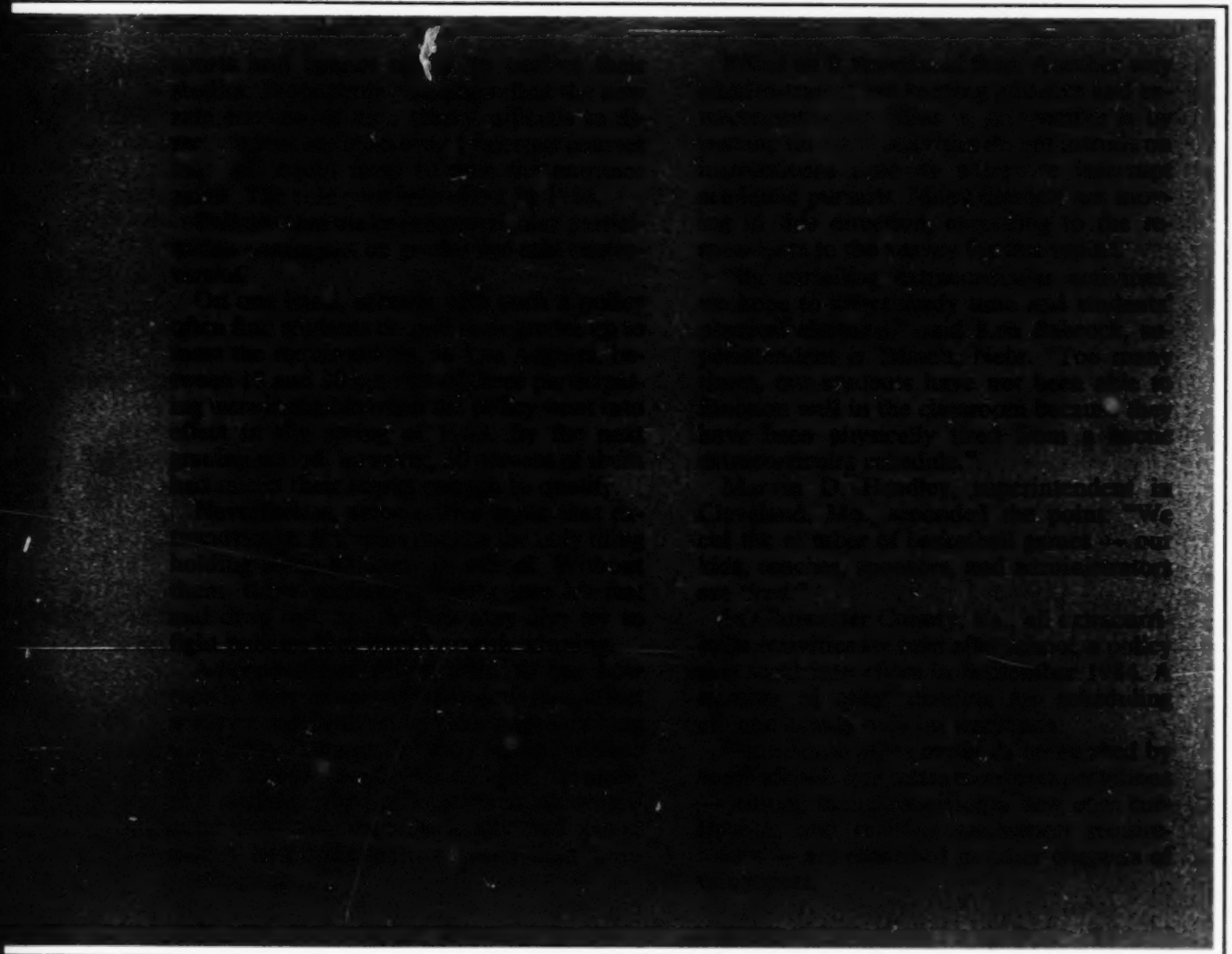
year, 26 states provided these scholarships, although about 80 percent of the money for the awards was concentrated in five states.

A survey by the College Board indicated, moreover, that the number of scholarships given by four-year colleges is on the rise. About 86 percent of the colleges now give some merit scholarships, up from 54 percent in 1954. Some colleges have acquired private funds to support scholarships for National Merit finalists and semi-finalists.

Raising Expectations Through Homework Policies

Some districts are using homework and attendance requirements to let students know they are expected to take schoolwork seriously. *A Nation at Risk* urges that students be assigned more homework, and studies have generally shown that American students, on the whole, do not face a heavy burden of homework. According to *A Nation at Risk,* two-thirds of the high school students in this country spend less than one hour per night on homework.

A survey by the North Carolina State Department of Public Instruction in 1983 showed that fewer than 25 percent of the sixth and ninth graders in that state's public schools spent as much as five hours a week on homework. The survey also found that North Carolina students



who spent more time on homework tended to score higher on achievement tests.

In Philadelphia and New York City, school officials have determined that formal homework standards should be set for their students.

As a minimum districtwide standard, Philadelphia administrators insist on homework four nights a week for elementary school students and three times a week in each major subject for high school students.

New York City's policy calls for daily homework for all students, with a minimum of 20 minutes for grades 1 and 2, one hour for grades 7 and 8, and two hours for high school students.

In Whitmore Lake, Mich., setting a homework policy became a consultative effort. This district's policy was formed by building advisory committees. They spent weeks discussing the issue before reaching a decision in early 1984. As part of the effort, the committees surveyed parent, student, and staff opinion on the subject. The final policy says that homework has four important purposes:

1. Homework provides students with reinforcement and supplemental learning opportunities that cannot be scheduled in the limited instructional day.
2. It encourages the development of self-discipline and good working habits.
3. It provides opportunities for vital parent-school partnerships in support of education.
4. It helps emphasize the high academic standards of the school district.

The district says furthermore that homework should be an integral and relevant part of every student's instructional program and that it should be used consistently throughout the grades.

Rules and regulations specify that:

1. Homework shall be used to supplement, extend, and reinforce that which is presented in the classroom.

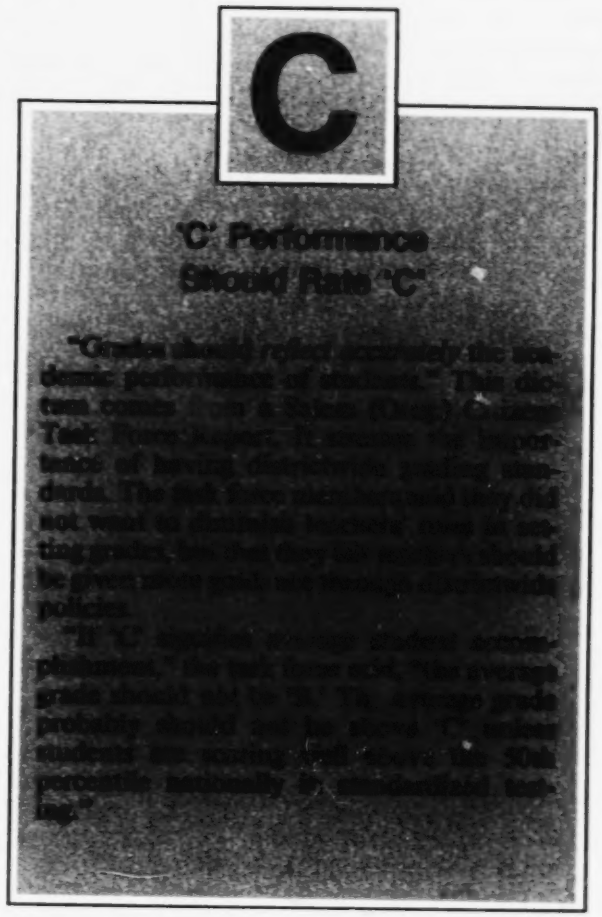
2. Homework completion shall be recorded and reported in the student's report card.

3. Teachers shall monitor homework assignments and provide necessary feedback and correction to students.

4. Teachers shall inform parents and students of the amount of homework that is required for their classes. As a guide, students will usually be assigned at least the following total amounts of homework each week:

Grades K-2	1 hour
Grades 3-4	1½ hours
Grades 5-6	2 hours
Grades 7-8	2½ hours
Grades 9-12	3 hours

5. Principals and teachers shall work with parents to obtain their cooperation in supervising their children's homework.



Resource on homework policies. For school districts that are considering homework policies, a booklet published by the San Mateo County (Calif.) Office of Education (333 Main St., Redwood City, Calif. 94063) offers some suggestions. The booklet, *The Educator's Digest of Reform: A Comparison of 16 Recent Proposals for Improving America's Schools,* recommends looking into three areas:

• Will the school provide alternative sites for students whose homes are not suitable environments for study?

• What other valuable learnings — community service, home projects, athletics, or academic competitions — can be defined as homework that goes beyond the traditional textbook assignment?

• Can teachers be provided with the time needed to review homework, through reduced class size or aide assistance?

Montgomery County casts a negative vote. At least one local board of education refused to set definite homework standards on the grounds that such a policy would unduly interfere with teachers' prerogatives — telling them, in effect, how to teach a class.

The Montgomery County (Md.) Board of Education narrowly defeated a measure that would have required high school teachers to give homework at least three nights a week in all classes. Some board members objected to the measure because no data were available on how much homework students in the district were already doing.

Raising Expectations Through Attendance Policies

Although the Montgomery County (Md.) Board of Education would not set a homework policy, it did set a strict attendance policy, effective in the fall of 1984. The policy said that any student with five unexcused absences not only loses credit for missed courses, but also gets a mark that counts as an "F." Previously, students who missed too many classes could take an "incomplete," which had no effect on their official transcripts.

The Dallas (Tex.) Independent School District tightened its attendance requirements in 1983-84. Previously, district policy stipulated that students with five unexcused absences should receive a failing grade. But students kept finding ways to justify their absences.

"If a family went on a ski trip, they told a white lie," noted Gerald King, director of pupil accounting for the district.

Under the new requirements, parents must provide documentary proof — doctor's excuses describing illnesses in detail, or hospital records — to justify lengthy absences.

"To begin with, parents were upset," King said, "but things settled down."

At one school, he estimated, attendance increased 3 percent, due partly to the policy change.

The district also operates a computerized phone system that helps curtail absences. Families of absent students are called throughout the day, if there is no answer at first, to make sure they know their children are not in school.

In other districts, administrators are also making the point that vacations with parents or part-time jobs are no longer valid excuses for missing school.

The attendance policy of the Bay Shore (N.Y.) High School clearly states that visiting or vacationing with family, work, "being needed at home," or oversleeping all constitute illegal absences from school.

In Lima, Ohio, the attendance policy asks homeroom teachers to call a student's family the first and second time he is absent. On the third absence, a counselor becomes involved. With the fifth absence, the student must meet with an administrator. If there is a sixth absence, a parent must come to school.

"This is a way of preparing students for the world of work," explained Roger Miller, high school principal. "If a student missed this much school, it would affect his work performance in future years." With that policy, the school has gone from an attendance rate of 86.9 percent to 93.6 percent.

Raising Expectations Through Testing

The need for standards that can be assessed, proving that students are really learning what they are supposed to learn, is a frequent theme of the reform proposals of the 1980s. *A Nation at Risk* calls for administering such tests "at major transition points from one level of schooling to another, and particularly from high school to college or work."

Many states have mandated that students must pass basic skills tests. Florida has required high school "exit" exams since 1978, although the issue was tied up in the courts for several years, where black students argued that the tests — in language arts and mathematics — discriminated against them. In 1984, however, Florida courts ruled that the tests were legitimate, as long as the content of the tests was actually taught in the schools and remediation opportunities were available for youngsters who failed.

In the spring of 1984, the success rate on the Florida tests jumped to 87 percent, after hovering around 78 percent for several years. Florida educators think these figures indicate the testing program's value. "When the judge finally ruled on the legality of the requirement," said Renee Henry, mathematics consultant for the state education department, "the kids knew they had to do it and they buckled down. Every single teacher was trying to get them to pass the tests."

Mastering basic skills, although important, is just the first step toward excellence, guaranteeing only that a student has achieved a minimum skill level. Some state departments of education, recognizing this fact, are developing "second generation" competency tests that will measure higher levels of learning.

West Virginia is studying how to make its competency tests more rigorous, and New Jersey revised its tests to deal with more difficult items, such as higher level thinking skills in math and reading.

To assure that competency tests do not simply serve as a device for sorting students into "the competent" and the "not competent," many districts are making sure that testing is done early enough to leave time for remediation before graduation day arrives.

The Houston (Tex.) Independent School District expects students to pass an eighth grade-level basic skills test before graduation. If a student has not passed by the end of grade 10, an academic review panel is convened at the student's school. It monitors his or her progress and draws up a remediation plan. Students cannot participate in extracurricular activities or work/study programs unless they follow the plan and enroll in needed courses.

In Mechanicsburg, Pa., sophomores at the Cumberland Valley School District must pass competency tests in English, social studies, and mathematics or they cannot enter electives programs in grades 11 and 12.

Extensive remediation is an important feature of the Appleton, Wis., competency testing program, used in that city's school system since 1978. Students can take the tests any time after the eighth grade, and for those who fail, district teachers and administrators have developed remedial mini-packs. Each focuses on teaching a specific skill required for the tests.

The first time the tests were administered, about 85 percent of the students passed all the skills, which were aimed at the sixth-grade level. Now, about 99 percent of the students pass the tests before graduation day, including youngsters in special education. "These students also need to function at an adult proficiency level in basic mathematics and reading," explained Jim Westphal, director of academic services for the Appleton schools. After the eighth grade, students can take the tests as many times as they need to pass, and once they master a skill, they are not tested on it again. Diplomas are worded differently for those who do not pass the tests.

Many school districts are also moving to set clearer performance standards for individual classes and subjects. Some examples:

- Teachers in the Brevard County Schools, Rockledge, Fla., are attempting to define measurable performance standards for all credit-bearing classes as part of their drive to raise expectations.

- In Houston, Tex., schools are also defining course proficiencies in all content areas and grades.

- In Whitehall, Mich., district personnel have set high student performance standards since 1981 for all subjects in grades 1-12. The standards were the result of a year-long study by teachers and administrators. "Each student is introduced to every skill, but not all will attain them," notes a district booklet on course standards. "A student mastering all the skills in any subject can be considered an excellent student in that area," it concludes. Standards have been established for vocational and personal service courses as well as for academic subjects.

Use of time for learning is a key to excellence, according to many recent reform proposals. They advise administrators to carefully scrutinize whether schools provide enough time for academic instruction and whether time is used as productively as possible.

Districts can increase learning time in two ways, suggests *A Nation at Risk:*

1. By extending the school day and the school year (a seven-hour day and up to 220 days a year are recommended for consideration).

2. By more effectively managing the time that already exists in the school day.

Suggestions to extend the amount of time students spend in school are highly controversial to some educators and groups. A resolution endorsed by a task force of the National Association of State Boards of Education noted that "there is little evidence that extension of the school day or the school year would lead to increased student achievement." It suggested that learning time be increased by spelling out the minimum amount of the school day that should be spent on academic subjects and by setting strict policies on student absences.

Some administrators similarly veto proposals to lengthen the school day or year.

"Extending the school day and school year are as desirable in our area as a plague," noted Supt. Donald E. Markley, Big Horn County Schools, Basin, Wyo.

Added Supt. James W. Lofquist of Laurel, Nebr.: "Our parents are opposed to a longer school year. We schedule a 185-day school year. We never have less than 175 days with teachers and students in session. Interruptions in the school day for extracurricular activities are held to a minimum."

Most administrators who answered the Critical Issues survey for this report are turning to the second strategy suggested by *A Nation at Risk,* and many indicated that better use of time is one of the first areas they are tackling to improve educational quality.

State Actions

Many states are concentrating early efforts on improving time use, too, and a few have added time to the school day or school year. Here are some examples:

- Arkansas increased required instructional time to 5½ hours a day and plans to extend the school year to 190 days by the fall of 1989.
- California legislation gives schools financial incentives to stay open a few extra days and hours.
- Florida law provides for a seven-period day.
- Louisiana has added 30 minutes to the school day for the elementary grades.

District Actions

Some school districts have also added small blocks of time to their daily or yearly schedules. The school year in Cook County, Wis., now runs an extra three days.

Many districts have increased the number of minutes per day. The Barber County School District in Medicine Lodge, Kans., added 10 minutes to its 6-hour and 20-minute day. Schools in Wichita Falls, Tex., run 15 minutes longer than in the past.

In Blauvelt, N.Y., educators increased the school day to accommodate an additional period,

a step administrators feel will provide more time per period and greater flexibility in student programs.

Some districts have also increased school time for teachers. The Mendon, Ohio, schools added an extra 45 minutes per day for inservice staff training, in preparation for launching a new competency-based education program.

New Mandates

Many states have set standards for using time in elementary and middle schools, prescribing, in effect, a core curriculum.

The Kentucky State Department of Education, for example, specifies how many minutes elementary and middle schools should devote to each major subject as follows:

Subject	Elementary (grades 1-5)	Middle (grades 6-8)
Language Arts	150 min./day	60 min./day
Mathematics	60 min./day	45 min./day
Science	120 min./week	45 min./day
Social Studies	120 min./week	45 min./day
P.E.; Safety	100 min./week	15 min./day
Health	60 min./week	60 min./week
Fine Arts	120 min./week	75 min./week
Applied Arts; Career Education		75 min./week

Other states. The Texas State Board of Education also set statewide standards for the amount of time students in kindergarten through grade 6 spend on different subjects.

Ohio specifies minimum instructional minutes for academic subjects in the elementary grades, a step that lengthens the school day by 15 to 30 minutes for most districts in the state.

Indiana excludes certain activities (e.g., lunch, pep rallies) from being counted toward the minimum instructional time of 360 minutes for junior and senior high schools and 300 minutes for elementary schools.

Implementing New Standards

What if there's interest or discussion in your district about adopting standards for time use or attempting to use "time-on-task" research to modify current practices?

Here's one approach to consider:

- Start by becoming familiar with the research (see box in this chapter).
- Determine how much school time is formally allocated for each subject area, according to curriculum guides and other directives.
- Observe what is happening in the classroom. Determine whether teachers are giving the subjects as much time as they should and whether they are keeping students on task in these subjects.
- Schedule teacher training to help staff develop necessary skills in keeping students on task.

Some districts can offer valuable guidance to others on implementing new time standards. Examples follow:

Polk County, N.C.

The Polk County district was one of two in the state that pilot tested a longer school year in 1983-84. The district moved to a seven-hour school day and, at the same time, extended its 180-day school year to 200 days. The schools were open from August 15 to June 30 for students and from August 1 to June 30 for teachers.

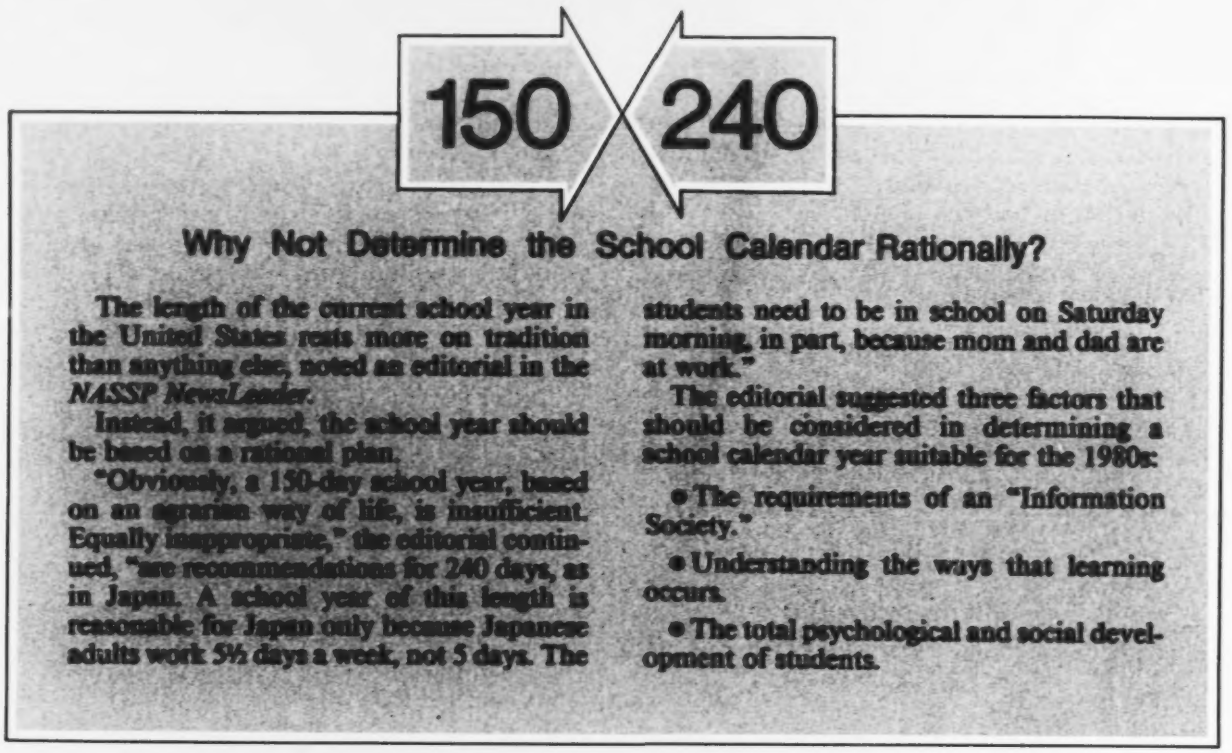
At the same time the school year was lengthened, district administrators also decided to improve effective time use. Before school started, the district conducted intensive staff development on time-on-task.

Principals worked with teachers explaining concepts from research. They also took a hard look at some of the things they were doing that might affect time usage. "We started with the central office," recalled Supt. James Benfield in an interview for this report. "We asked ourselves what we could do to reduce interference with principals and teachers' time. 'Were we asking for too many reports? Could we plan a better schedule?'"

Next, principals scrutinized their behavior vis-a-vis the teaching staff and tried to limit things like announcements over the public address system, pulling teachers out of class during lessons, and allowing surprise visitors into classrooms. They also looked at record-keeping and scheduling with an eye to protecting classroom time.

Teachers were invited to suggest ways that principals could help them, and principals were encouraged to recommend changes to the central office.

The give-and-take between teachers and ad-


150
240
Why Not Determine the School Calendar Rationally?
The length of the current school year in the United States rests more on tradition than anything else, noted an editorial in the *NASSP NewsLeader*.
Instead, it argued, the school year should be based on a rational plan.
"Obviously, a 150-day school year, based on an agrarian way of life, is insufficient. Equally inappropriate," the editorial continued, "are recommendations for 240 days, as in Japan. A school year of this length is reasonable for Japan only because Japanese adults work 5½ days a week, not 5 days. The students need to be in school on Saturday morning, in part, because mom and dad are at work."
The editorial suggested three factors that should be considered in determining a school calendar year suitable for the 1980s:
• The requirements of an "Information Society."
• Understanding the ways that learning occurs.
• The total psychological and social development of students.

ministrators made it easier for principals to move to the next step in their time study — classroom observation. "We approached it from the point of view that we were all looking for ways to make more time for teaching," Benfield explained.

Tip: Polk County principals were careful to explain that the time-on-task evaluations were not performance ratings and would not be used to make judgments about jobs or salaries. Most administrators who have been involved in time improvement efforts say this is an important consideration. They explain: Teachers who think they may be penalized as a result of the classroom observations may not cooperate with administrators.

After observing the teachers, Polk County administrators concluded that teachers were allocating enough time to various subjects and were keeping students engaged. However, the teachers did need to upgrade their ability to diagnose the level of work students should have to give them success and yet challenge them. Teachers, they concluded, would need further training to handle this aspect of the program.

Another tip: Change takes time. Polk County school officials planned to call on outside help to train teachers in prescribing instruction that gives children the right degree of success. Benfield said this staff development effort would last about three years, but he said he expected the results to be well worth the effort. "Students won't be bored during the extra school time if they are exposed to good, creative teaching," he predicted.

Benfield said it is too early to say what effect time-on-task and the longer school year will have on students in his district. While achievement test scores rose in 1982-83 (the first year of the longer-school-year experiment), they had been improving slowly but steadily for some time.

Benfield did note a sharp rise in student scores on basic competency tests. In 1982-83, this rural district in the western North Carolina mountains outscored only three other districts in the state on basic skills reading tests and only nine in mathematics. In the following year, 10th graders in Polk County outscored 115 districts in reading and 90 in mathematics. The test scores reflected only about nine days of extra school time that fall.

The 200-day year. In the first year of the 200-day year, the program ran fairly smoothly. State aid took the financial burden off the county's shoulders, paying the additional 10 percent that extra time added to the district's budget.

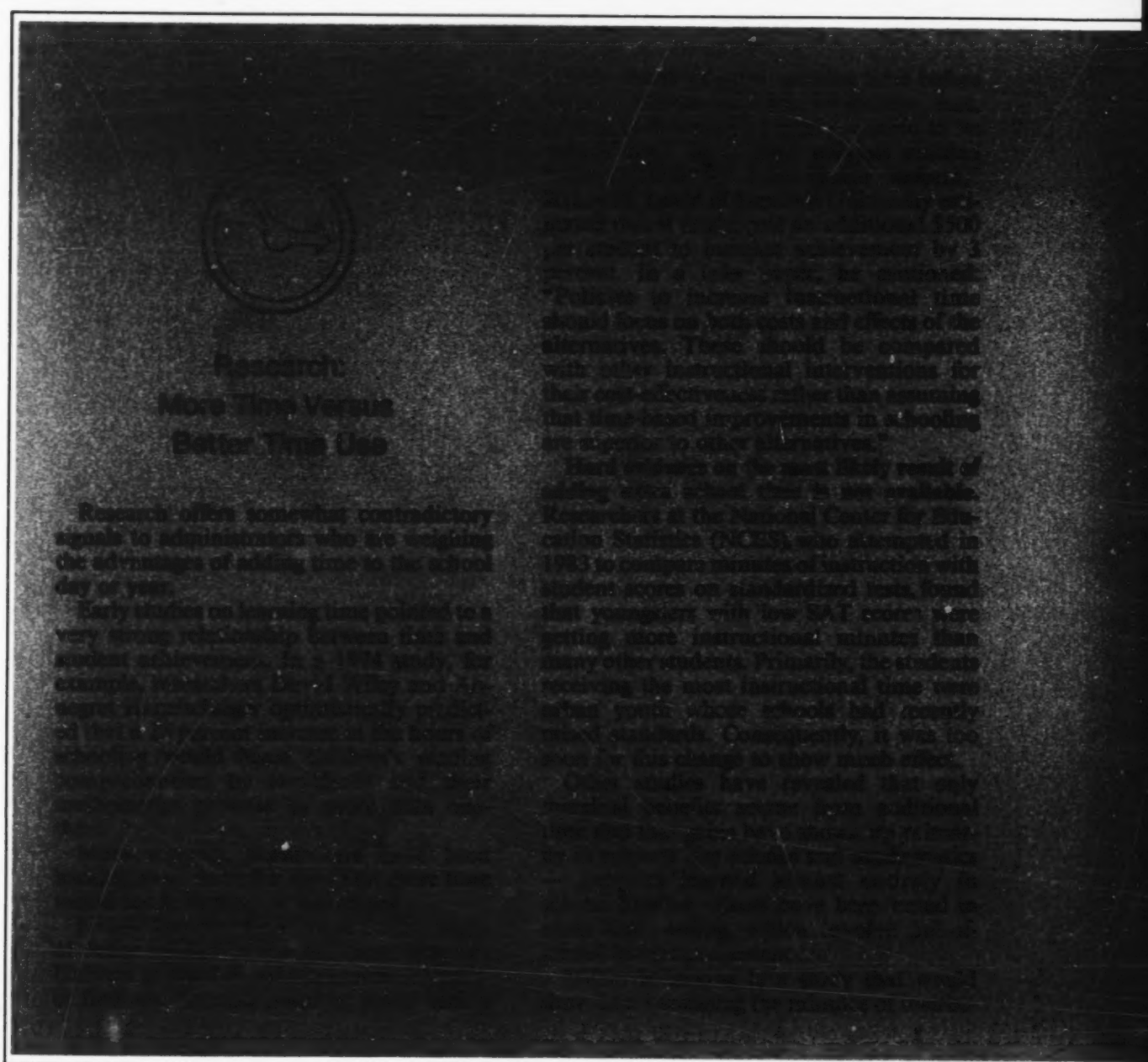
Problems with the staff were minimal. Princi-

pals were completely behind the program, and a poll showed that about 70 percent of the teachers backed the idea. (Benfield attributed only one teacher resignation to the extra time.)

Polk County administrators did not notice any increases in student discipline problems or in the dropout rate.

The district's problems with the program had more to do with local politics than education. Schools in both Polk County and Halifax County (the other pilot site for the 200-day year) ended up in court over the new policy. Both districts successfully fought off suits brought by county residents, however.

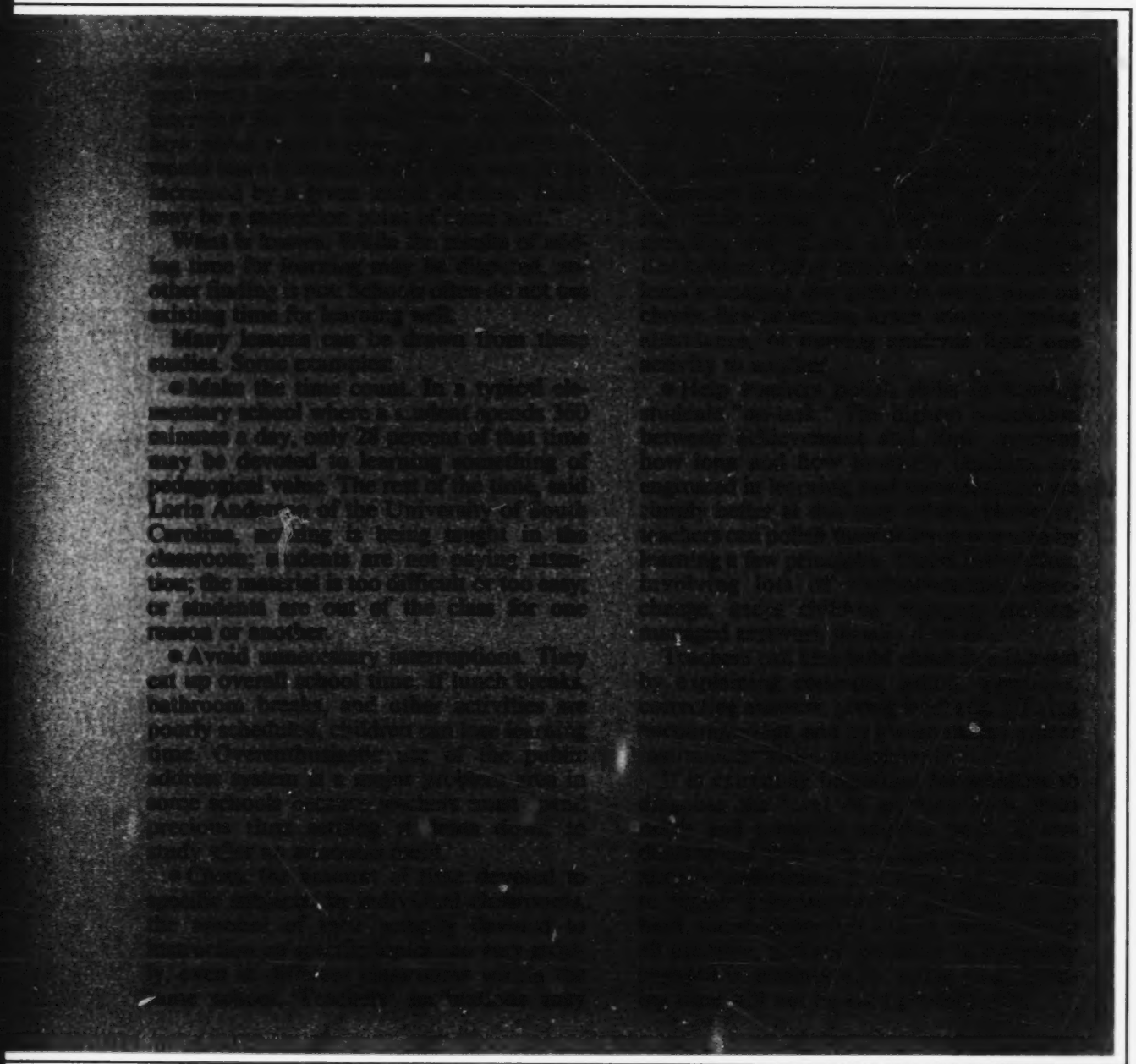
Polk County's chief problem involved the way the program was adopted. County residents objected most of all because the plan was adopted without a public hearing. "Some people wanted



their children to be home more, but the biggest objection was that we did it in such a hurry that the community was not able to discuss the issue," Benfield said.

The district actually had only one week between the time it received application papers from the state department of education and the deadline for returning them. Although the court decided in Polk County's favor, the whole affair put a strain on school staff and left some teachers feeling discouraged.

As a result of new state money for the longer year and a 53 percent local budget increase, Polk County schools were able to offer advanced courses in trigonometry, calculus, chemistry, and historical research; to add a second year to a health occupations program and a computer programming course; to start algebra in grade 8; and



to offer freshman pre-algebra. With the longer school day, remedial students could take additional basic skills courses without missing their academic subjects — something the district could not do previously.

As for validated effects on achievement, the verdict is still out. Benfield believes that one of the chief advantages will turn out to be a reduction in the loss of learning that students formerly experienced over the summer.

Benfield believes the extra time will pay off in a few years. "With good programs and good teaching, it's got to help."

Note: For most districts, the costs of operating a year-round school could prove prohibitive. Experts advise that administrators should carefully consider the cost effectiveness of this strategy and look at ways to make improvements in how existing time is used.

For more information, contact James Benfield, Superintendent, P.O. Box 697, Columbus, N.C. 28722.

Bristol, Pa.

The effects of a long-term time-on-task project can be seen at Warren Snyder Elementary School, Bristol, Pa. It began working with Research for Better School (RBS), a regional education laboratory in Philadelphia, in 1980.

Now, said John Girotti, director of elementary education for the Bristol Borough School District, in an interview for this report, teachers manage their time much better — a fact that is reflected in students' reading and mathematics performance.

To get the project started, laboratory staff trained "local action teams" composed of teachers and administrators to go into a classroom and quickly observe the activities. The teams must make 15 observations about how students are responding to teachers in a half hour.

Training the teams took about six months in all, including two all-day workshops, Girotti said. The teams then trained fellow teachers to perform observations, and before long, every teacher at the school was skilled in the process.

Two years of preparation. In all, the school staff spent two years on various training activities before getting ready to put time-on-task into action. Teachers were also asked to keep track of how they allocated their time, allowing observers to compare teachers' intentions with what was actually taking place in the classroom.

What Price a Longer School Year?

An AASA study, *The Cost of Reform: Fiscal Implications of "A Nation at Risk,"* put a price tag of 14.3 percent extra on the cost of providing a 7-hour, 200-day school year (if teachers were paid at the salary levels recommended in various reform documents). The estimate was based on a survey of 28 districts nationwide.

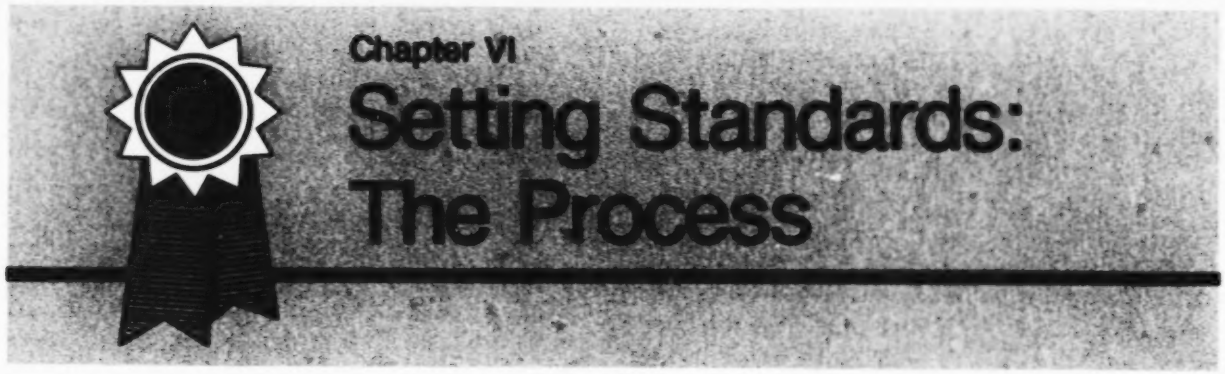
If each state added one month to the school year, the cost would be an extra $5.3 billion just for teacher salaries, according to an estimate by the National Education Association. Additional costs would involve air conditioning in many parts of the country and transportation in some areas.

Girotti credits the new program with several changes. For one thing, classes get started more quickly. Teachers begin reading classes first thing in the morning, before children start leaving homerooms for activities that involve special teachers or other instructional personnel.

The school has also introduced short periods of sustained reading and mathematics in time periods that were formerly wasted — the first few minutes of class, just before lunch, and just before afternoon dismissal. The silent work adds about 10 minutes of instructional time each day in the crucial subjects of reading and math. "Ten minutes doesn't seem like much," noted Girotti, "but if you multiply that by five days a week all year, you're adding quite a lot of time."

Teachers have also devised strategies such as giving children work packets as they enter a room, so they can start work immediately, and keeping children occupied with worksheets while teachers perform chores like collecting lunch money.

For more information on the RBS approach, contact David C. Helms, Research for Better Schools, 444 N. Third St., Philadelphia, Pa. 19123.



Chapter VI

Setting Standards: The Process

What process does a district use in moving toward higher standards? One answer to that question can be found in *Excellence in Our Schools: Making It Happen* (published by the American Association of School Administrators).

Here's a slightly edited version of the process it suggests:

• **Prepare.** Urge staff, board, parents, and key members of your community to become informed about various reform proposals, such as the one outlined in *A Nation at Risk*. Have them pay particular attention to the issues, implications, and cautions surrounding each set of recommendations.

• **Form working groups.** At the district or building level, invite these people to serve on working groups. These groups should take a fresh look at the recommendations found in various reports, and be prepared to turn these recommendations into suggestions for action to make schools even more effective.

• **Set a format for your meetings.** Form small teams of 8 to 10 participants representing different community and staff groups. Ask each team to agree on one set of recommendations as the focus of its work. Ask team members to be specific in explaining what your schools are doing now or what they would like to see the schools do. Devote one or more sessions to discussing each set of recommendations each group has either chosen or been assigned.

• **Convene the meeting.** Identify "what we are doing now" in dealing with the needs pointed out in the recommendations. Identify "what we should be doing." Develop a plan that will lead to the needed changes. Examine each strategy in your suggested plan of action and rate it on the basis of its cost and importance.

• **Reconcile differences.** You may wish to have groups who have addressed the same set of recommendations confer on their work and reconcile differences. Or you may want to turn all recommendations over to a task force which will integrate and reconcile differences at a later meeting.

• **Develop a "school improvement focus."** If plans for improvement are already under way, incorporate them into the plan of action. The district may want to incorporate into a districtwide plan those changes that might make all of its schools more effective. At this point, a community survey will help determine levels of understanding and levels of support for the plans which have been developed. Then, each major initiative should be assigned to an individual and/or task force for further study, more detailed plans, and investigation of budgetary and policy implications. A communications plan, for example, will be needed to develop staff and community understanding of the initiatives. The action plan will have to be monitored and modified, if necessary, to promote its success.

• **Form a community coalition for excellence.** Include representatives from several key groups, such as parents, business and industry, labor, nonparents, educators, government leaders. Work with the coalition to build a consensus and support for quality schools.

• **Establish a theme.** Give your improvement effort a theme that the community and staff can identify with. An example: "Good and Getting Better."

• **Communicate your plan.** This should be done

continuously through speeches, newsletters, contacts with parents, community leaders, and the news media. Give progress reports to help the community and staff feel a part of the total effort.

Case Study: Glendale, Ariz.:

The Glendale (Ariz.) Elementary School District arrived at a consensus on educational priorities by using a process very similar to the one described in the AASA booklet, *Excellence in Our Schools: Making It Happen.*

The process was described by Christa Metzger, the district's assistant superintendent for instructional services, in the November 1984 issue of *Phi Delta Kappan* magazine.

Selecting recommendations. First, Metzger said, the district selected 66 recommendations from the reports issued by the National Commission on Excellence in Education, the Arizona Governor's Committee on Quality Education, and the Task Force on Education for Economic Growth of the Education Commission of the States.

Gaining community input. The district wanted to find out which of the 66 recommendations citizens thought were important. It wanted to do so, moreover, without a lengthy community survey or taking a great deal of administrative time.

Administrators decided to establish a "Reaching-for-Excellence" Task Force composed of 79 district staff members and top community leaders. The task force included the mayor, the president of the Chamber of Commerce, a state legislator, three ministers, representatives from civic and service groups, the chairperson of a senior citizens committee, the chairpersons of the Hispanic community's neighborhood councils, the presidents of the parent organizations at each district school, and the student body presidents from each school. District staff included a teacher (elected by the faculty) from each school, several principals, and district administrators.

"Because these people were too busy to devote a lot of time to our project," Metzger said, the meeting was limited to one day, plus an evening orientation session.

The 66 recommendations were grouped into the five major categories used by the National Commission on Excellence in Education: content, time, standards and expectations, teaching, and leadership and fiscal support. Next, the recommendations were formulated into a rating instrument, which was given to each participant at the orientation meeting. In addition, the district provided participants with brief descriptions of current district programs in each of the five major areas.

The orientation meeting was used to pass out materials and to explain the process that would be used at the all-day workshop, which was 10 days away. As homework, participants were asked to complete the rating instrument for the 66 recommendations by answering the following question for each: "Considering recommendations from the reports and what we're doing locally, what priority would you suggest for local action?" Participants were asked to assign a rating from 1 to 5 (with 5 the highest) for each item.

Reaching consensus. At the full day meeting, participants were divided into 10 groups of approximately eight persons. The groups were asked to discuss the ratings and reach consensus on the value of each recommendation. District personnel were available to answer participants' questions about district programs, and professors from Arizona State University served as facilitators to help groups reach consensus.

After the meeting, central office staff compiled and tabulated the responses from all 10 groups. The results were ranked and presented to the School Board. The district drafted a follow-up plan describing what the district was doing in each high-priority area and establishing deadlines for completing follow-up activities. The name of the person or department responsible for follow-up activities was included, along with the estimated cost (if any) that each activity would require.

Subsequently, the plan was submitted to the Board of Education, other district staff members, and the community for input. Copies of the revised plan were sent to the original task force members, and they were encouraged to submit their comments and ideas to the district. Another revision of the plan, using suggestions from all of these groups, was prepared by the administration.

In September 1984, approximately nine months after the initial task force meeting, the district was ready to start implementing the plan.

The highest priority among the 66 recommendations was that students be given a solid foundation in written and oral communications skills. The next highest priorities were:

• Teachers should demonstrate an aptitude for teaching.

• Teachers should demonstrate knowledge and competence in their content areas.

• The teaching of arithmetic (both computation and problem solving).

The lowest priority item was "considering longer school days."

Some of the results of the study, as noted by Metzger: The district plans to refine and strengthen the textbook selection process; to develop objectives to incorporate thinking and problem-solving skills into all curriculum areas; to revise district policy and guidelines on student conduct; and to thoroughly review existing procedures related to testing, grading, and promotion of students.

Metzger noted that the district intends to incorporate the recommendations into district planning and to issue periodic progress reports on follow up actions to the Board of Education and task force members.

She concluded: "Through the 'Reaching for Excellence' task force, our community has been involved and our teachers, administrators, students, parents, and citizens have worked together toward a common goal. This effort has resulted in a list of priorities that gives our district a blueprint for the future."

Case Study: Salem, Oreg.

When the Salem (Oreg.) Public Schools decided to examine their programs and services in comparison to recommendations in *A Nation at Risk*, Supt. William M. Kendrick appointed a 15-member citizens' task force.

Its charge was to review the recommendations of the National Commission on Excellence in Education in five areas: content, standards and expectations, time, teaching, and leadership and fiscal support. Kendrick also advised the task force: "Don't tell me what I want to hear. Tell me what I need to hear."

The committee followed this timeline:

Activity	Timeline
Orientation Meeting	July 19
Work Sessions	Aug. 2-Sept. 20
Public Hearings	Sept. 27, Oct. 4 and 20
Subcommittee Work Sessions	Oct. 20-Dec. 13
Final Report to Superintendent	Dec. 20
Superintendent Refers Report to School Board	Dec. 20

The task force met almost weekly, dividing into subcommittees in mid-October.

Input. Task force members sought information and input from teachers, administrators, and students. Extensive data were assembled with staff assistance on curriculum, personnel, fiscal management, and a variety of areas pertinent to the study.

The task force drew on a report from the Oregon Department of Education (*Oregon Action Plan for Excellence*), which proposes eight actions to move education in the state toward excellence. It also had access to reports, plans of actions, and responses to *A Nation at Risk* developed by other districts and educational organizations nationwide.

Task force members visited schools and interviewed teachers, principals, classified staff, administrators, and students. They received additional input from business and college representatives, community leaders, parents, and local citizens. Public testimony was taken at most

of the weekly meetings, and at five public hearings.

Within six months of its appointment, the task force had produced 34 pages of proposed actions.

"They were the hardest working group I've ever dealt with in my 10 years of education," said Greg Hanson, community relations specialist for the 22,500-student district, in an interview for this report. "They devoted literally hundreds of hours of their time."

The process went smoothly, according to Hanson. "Some people were afraid we might put the report on the shelf, or that the superintendent would try to manipulate the citizens group. But we kept hands off." Consequently, he said, educators and outsiders worked comfortably together.

The district responds. Within two months of receiving the task force report, the district administration had examined each of the recommendations (53 in all). They were reviewed for financial, legal, programmatic, and political implications.

Supt. Kendrick then prepared his review of the recommendations and presented it to the school board. He listed the text of each recommendation as stated by the task force, and followed it with a "status" report, and his recommendation. An example follows:

Task Force Recommendation

"The language arts requirement for graduation should be increased from three to four units. Greater emphasis at every grade level should be placed on reading, writing, communicating and listening."

Status

"Although many students graduate from high school with four credits in English, the current district requirement is three. The district is in the process of revising English goals and objectives to be published this spring. The revised goals place greater emphasis on basic skills. There are no specific required courses in the current senior high program. In addition, North Salem High is piloting a program which uses paid readers to correct composition papers. The district is reviewing budget implications of this program to see if it can be expanded to all high schools.

"The new competency tests renew the emphasis on reading, writing, speaking, and listening. The district also conducts an annual review of core course offerings."

Superintendent's Recommendation

"I recommend that the district increase the graduation requirement in English to four credits beginning with the class of 1988. Within these four credits, I recommend that the district require at least one full credit in writing and two full credits in literature.

"I will direct staff to redesign the senior high English curriculum to include required courses for students in grades 9,10, and 11. I recommend that the curriculum keep the best of the current elective courses and make them electives for the senior year. The curriculum would require all students to take a year of American literature and at least a semester of English literature.

"I request that Language Arts in the secondary schools be retitled English/Reading. I am directing staff to change the job descriptions accordingly.

"I am directing staff development to create ongoing inservice courses in teaching composition. I am recommending that the district use secondary English teachers to teach inservice courses for elementary teachers.

"I will encourage secondary English teachers to attend professional seminars and conferences to update their skills.

"I recommend the district provide readers for correcting compositions in all middle and senior high schools.

"I have directed staff to establish the new competency requirements in reading, writing, speaking, and listening."

To show how the requirement would be implemented, the superintendent also drew up a "Language Arts Work Plan." It included timelines and persons responsible for each action (see the illustration in this chapter).

Other outcomes. As a result of the Salem task force's recommendation, district administrators decided to rewrite the district's statement of purpose (something the task force felt was very important for establishing an academic focus in the schools). An even more aggressive program to recruit volunteers, especially senior citizens, was organized. (They make up a large portion of the district's population.)

Other responses included reorganizing administrative functions, cutting six positions in an attempt to become fiscally leaner, and initiating a long-range planning process. Smaller task forces were set in motion to review the possibility of a longer school day and year, curriculum content changes, various incentive schemes, and proposals for an updated tax base.

Salem School District 24J
Language Arts Work Plan—1984-85

B-1 TASK FORCE RECOMMENDATION

The Language Arts requirement for graduation should be increased from three to four units. Greater emphasis at every grade level should be placed on reading, writing, communicating and listening.

WHAT	WHEN	WHO
1. Change graduation requirement to require the class of 1988 to earn four credits in Language Arts (English)	June 1984	School Board
2. Redesign the senior high curriculum	June 1984	District language arts, all senior high language arts department coordinators, senior high teacher committee.
a. Plan adoption schedule	August 1984	District language arts coordinator
b. Begin courses affecting the classes of 1988 and 1989	September 1984	Local building staff
c. Adopt courses affecting the class of 1989	September 1986-87	District language arts coordinator, teacher committee
d. Continue adoption until completed		
3. Retitle Language Arts as English/Reading	September 1984	School Board/Superintendent/Principals/ language arts coordinator
4. Design language arts elementary inservice program	October 1984	District language arts coordinator
5. Budget funds to allow for ½ day release, or funds to pay for conferences or courses for each secondary language arts teacher	1985-86 Budget Timelines	District language arts coordinator
6. Implement new competencies	September to October 1984	District language arts coordinator

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For more information, contact Greg Hanson, Salem Public Schools, P.O. Box 12024, Salem, Oreg. 37309.

Curriculum

In making decisions about new standards, educators will need to look at whether their district's overall curriculum meets its objectives, as well as at results in specific subject areas.

Three strategies that can help with this process are curriculum articulation, curriculum alignment, and curriculum mapping. These techniques can help planners construct a well sequenced total curriculum, to coordinate curriculum with tests, and to make sure that the curriculum serves all students, not just those in the academic tracks.

Curriculum Articulation

Curricular offerings in elementary school, junior high, and high school should dovetail, just as courses should mesh at the high school and college levels.

Many school districts have set up permanent review committees that overhaul curricula every five years or so, often working during the summer months to accomplish their task.

Besides seeing that courses dovetail, the committees also check to make sure that all the important content is covered at some point in the curriculum and that pertinent new information in subjects like science is quickly incorporated, and kept up to date.

The Association for Supervision and Curriculum Development has drawn up a six-step pro-

cess for curriculum review, based on the experiences of the 15 schools that participated in the association's core curriculum network.

The steps are:

- Establishing a process — announcing intent, forming a review committee, and assessing needs.
- Adopting a model — reviewing various ways to organize knowledge and either choosing one or designing a new framework.
- Identifying specific skills, competencies, and concepts that all students need.
- Planning curriculum changes by inventorying existing programs and restructuring courses (or adding new ones) and changing graduation requirements.
- Winning board approval. (Wise administrators will keep the board informed throughout the review process.)
- Implementing plans — in other words, completing the curriculum, selecting materials, conducting staff development, and deciding how to test to see that the desired learning is, in fact, occurring.

For more information, contact the Association for Supervision and Curriculum Development, 225 North Washington St., Alexandria, Va. 22314.

Curriculum Alignment

This strategy ensures that a district's testing program actually measures what the curriculum is supposed to teach. In a well aligned curriculum, tests measure curriculum outcomes accurately, because the content of both tests and curriculum are coordinated.

Many districts responding to the survey for this report reported they are using this technique in new instructional management systems. Many administrators in these districts feel this strategy holds more promise for raising standards than any other single technique at their disposal.

Savannah. A major curriculum alignment effort has been under way in Chatham County, Ga., since the summer of 1983.

As a first step, objectives that appear either on the district's nationally standardized tests or on the state's criterion-referenced tests were brought to the attention of language arts teachers. The goal: to be sure children are exposed to necessary information before testing takes place. (Tests are given every six weeks, or at every marking period, to measure whether objectives taught in the time period have been mastered.) Parents also receive checklists for the relevant objectives.

In addition, the district encouraged local teachers to write new test items through an incentive system. Schools where teachers wrote a sufficient number of questions for the district's item bank could qualify for awards.

Curriculum Mapping

Strictly speaking, curriculum mapping is a technique for studying how teachers use instructional time. It helps determine whether they spend as much time on specific topics as the curriculum guides prescribe, so that youngsters throughout a district experience similar coverage of core subjects.

This technique can also be used, however, to trace whether students in different schools — and in different tracks within the same school — receive similar exposure to core subjects.

The California High School Curriculum Study: Paths Through High School, released in 1984, illustrates the use of this approach. Researchers analyzed the educational experiences of students in various tracks in California schools and noted differences in counseling, subject matter exposure, textbooks, homework assignments, teacher expectations, and time in class.

Results showed that students' high school diplomas did not by any means represent equivalent educational experiences, even for those who attended the same school.

Students in average and below-average tracks usually could not complete a three- or four-year program of progressively advanced courses, whereas college preparatory students usually could. Often, sequential programs simply were not available outside the college preparatory track, and there were no provisions for students in lower tracks to move up.

Studies like this one can be a starting point for making decisions about high standards (such as whether to adopt a core curriculum). Michael Kirst, education professor at Stanford University, suggests that policy makers study overall curriculum before they start reviews in subject matter or departmental areas.

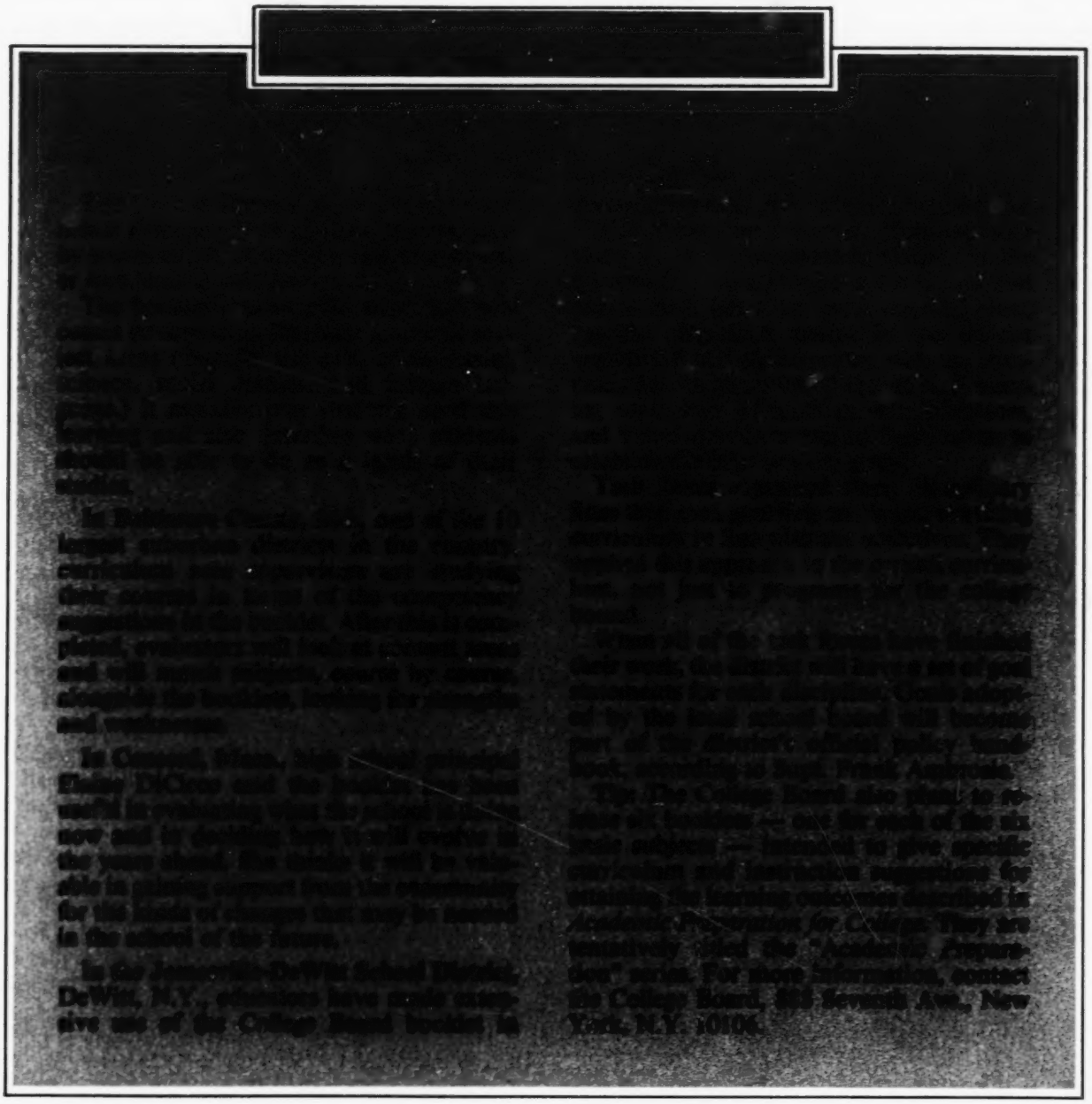
"Before making decisions on content," Kirst said, "local policy makers should comprehend the current content and how various types of

students flow through the curricular options and variations."

Case Study: California

California offers an example of a state that has long allowed local districts to make decisions on many education matters. Some of that local autonomy slipped away with the passage of legislation in 1983 setting minimum graduation requirements. Now, the state is trying to convince local districts that the minimum is not enough; that new, higher standards in the form of a core curriculum are in order; and that the time is right for each and every district to "buy into" the state model.

California considers curriculum reform (i.e.,



the development of the core curriculum) as the heart of its school reform movement. "All of the other changes that are beginning to make a significant impact on California's schools are related to and revolve around curriculum reform," noted a state spokesperson.

Here are the major parts of the state's reform movement:

Minimum graduation requirements. Starting in 1969 and continuing for 14 years, there were no specific high school graduation requirements in California schools. Each local district established its own. As a result, a student in one district could graduate with 190 units while students in another district needed as many as 265 units. In addition, said the California Department of Education, "many California students are enrolled in relatively few academic courses from grade 7 upward, with the consequence that they complete only half as many academic courses as most of the students in the rest of the nation."

With the passage of new legislation in 1983, new *minimum graduation requirements* went into effect. They called for:

- 3 years of English
- 2 years of mathematics
- 2 years of science
- 3 years of social studies
- 1 year of visual and performing arts or foreign language
- 2 years of physical education
- Other courses as required by local school districts

Model graduation standards. In June 1984, the State Board of Education adopted *model graduation requirements* that were both more rigorous and more specific than the minimum requirements. They called for:

- 4 years of English
- 2 years of foreign language (in the same language)
- 3 years of mathematics (including at least 1 year of algebra and 1 year of geometry)
- 2 years of natural sciences
- 3 years of social sciences (including 1 year of world civilizations, 1 year of U.S. history, 1 semester of civics, and 1 semester of economics)
- 1 year of visual and performing arts
- 1 semester of computer studies

In adopting the model graduation requirements, the Board challenged local districts "to raise their sights and to recognize what is necessary to achieve excellence in education." Districts could do this, the Board said, by developing their own high school graduation requirements and inviting the local community to participate in the comparison of local standards to those of the model. "Only such participation can result in the necessary commitment for effective reform," the Board said.

The Board asked local districts to phase in the model requirements for students entering high school in 1984 and graduating in 1988.

Along with the model graduation requirements, the State Board also issued descriptions of courses that would satisfy each model requirement. The description includes a listing of prerequisites, the aims and objectives of the course, and a general outline of course content.

Core curriculum. Finally, the State Board approved *Model Curriculum Standards* to further guide districts in offering the courses prescribed in the mandated graduation requirements (i.e., English/language arts, foreign language, history/social science, math, science, and visual and performing arts). Standards for physical education will be completed in 1985. These standards are, in essence, California's first core curriculum. They are described in detail in *Model Curriculum Standards: Grades Nine Through Twelve.*

The standards provide an in-depth view of the philosophy, the prerequisites, the goals, the content, the material, and, in a broad way, suggestions for how a course should be taught. (As an example, see standards for American government and civics in a box entitled "What Should Be Covered in a Core Curriculum" in this chapter.)

The legislation calling for the standards said they are meant to serve as a model, not as a mandate. There is a mandate in the same legislation, however, requiring each school district to compare its curriculum course content and course sequence with the model standards at least once every three years.

These standards offer, in the words of the state education agency, "the strongest possible professional consensus about what should be included in the core courses required for high school graduation."

The standards describe the content that should be covered by the time students have completed, for example, three years of English. They do not

What Should Be Covered in a Core Curriculum?

As part of the reform movement in California, new "Model Curriculum Standards" have been developed for courses required for high school graduation.

Local school districts must compare their local curriculum (title, course content, and course sequence) to the model standards at least once every three years. In this way, the state hopes to install a core curriculum — one based on [illegible] — that professional consensus agrees should be included in the core courses required for high school graduation.

As an example, three years of history are required for high school graduation. They are: U.S. history and geography; world history, culture, and geography; and American government, civics, and economics.

The model curriculum standards in American government and civics specify four prerequisites students should have prior to taking the course:

- A general knowledge of the duties and powers of the three branches of government and the distinction among federal, state, and local levels.
- A basic knowledge of the historical events and ideology that led to the formation of the United States as a nation.
- An understanding of world and United States geography.
- Basic and critical thinking skills related to the history-social science curriculum.

Expected outcome. What should the outcome of the course be? Here's what the standards say: "By the time students graduate, they should be able to understand how the American political processes work. In addition to becoming familiar with the structure and operation of the political system in the United States, students should be able to analyze some of the conflicts that confront the nation. In so doing, students will develop the ability to be effective decision makers and responsible citizens."

Goals of the course. A total of 19 are specified. Here are some samples:

"A course should show that there were principles considered essential to American government by the founding fathers" (e.g., separation of powers, checks and balances, due process, common shared values).

"A course should include the structure, operation, and capacity for change of American institutions, such as the Congress, the presidency, the bureaucracy, the judiciary, and political parties."

"A course should show that there are constant tensions between the desire for individual freedom, the necessity for individual ethical behavior, the will of the majority, the need for public order, and the relation of these tensions to the major contemporary domestic issues" (e.g. crime, tax paying, military service, First and Fifth Amendment limitations).

"A course should provide opportunities for students to analyze our government system in light of contemporary domestic and international issues" (e.g., increasing costs for social programs and national defense; role of the United States as a world power — changing policies toward other nations).

The standards for the American government and civics course provides teachers with the names of some important documents they will want to cover (e.g., Declaration of Independence, writings of Locke and Montesquieu, the Constitution) as well as several questions to challenge students (e.g., "What are the basic beliefs and ideals that underlie American democracy?", "How do our legal, governmental, and economic institutions affect public policy at the local, state, national, and international levels?" "How can the individual participate most effectively in the American political system?")

prescribe *how* the content is to be taught or *when*. They offer specific examples of the content and learning activities that would be found in a model program.

"These examples should be useful in guiding program modifications," the Department noted. It added that some districts may find that their curriculum is already consistent with the standards, while others may see the need for at least a two- to three-year curriculum revision effort to bring their programs up to the level called for in the standards.

Also included in each set of standards is an introductory statement that describes current needs and priorities for that subject area. This information should be helpful, the Department noted, "in making improvements in elementary and junior high school programs that will support the strengthened high school program." (Note: Model curriculum standards were being developed for grades K-8 as this report was going to press.)

The Development Process

To develop the standards, the State Department of Education convened curriculum advisory committees of 25 to 40 members in each curriculum area. Teachers, administrators, curriculum specialists, university faculty, parents, representatives of the business community, and the general public, as well as Department staff, took part in the development process. Some sets of standards went through as many as 10 drafts. More than 300 educators from 80 school districts reviewed the draft documents and took them home to their district staffs for further review. In other words, noted a spokesperson for the Department, "these standards represent what the best people in most subject areas think is best."

Uses

The Department is incorporating the model curriculum standards into many of its programs and services (e.g., teacher and administrator training). The State Board of Education has already adopted new textbook standards which call for "more challenging material aligned with the basic goals of the core curriculum, and for reading textbooks, an emphasis on high-quality works of fiction and nonfiction that have not been 'written down' to presumed low student reading abilities."

The standards will help shape the newly expanded California Assessment Program (which will test students in grades 3, 6, 8, 10, and 12) in reading, written expression, math, history, social science, and science. Formerly the tests covered only reading, written expression, and math in grades 3, 6, and 12. The standards will also influence development of a new set of examinations for high school students called the Golden State Examinations. Passing the exams would entitle the student to a special honors high school diploma. (These exams have not been developed yet because of lack of funding.)

The Local Role

At the local level, the process for reviewing curriculum and setting higher standards should be fairly similar to that used at the state level, according to Department officials.

The state education agency advised districts they can do their part in implementing the higher standards by engaging in discussion and consensus building. "Only through a process of open discussion and consensus building will teachers, administrators, principals, and department heads develop a sense of genuinely 'owning' the curriculum reforms," the agency said.

The Department considers the new curriculum standards as a "template" for local districts to use in assessing, designing, and improving their programs. Districts and schools, the Department advised, must develop a consensus about *how* to teach the curriculum content in a lively and involving way and *when* to teach what concepts and materials.

The agency advised administrators to hold a series of meetings involving key decision makers for the purpose of:

- Developing specific academic criteria and objectives for each grade level.
- Reviewing and revising the course of study for each grade level as necessary by incorporating the new criteria and objectives.
- Deciding what resources and technical support will be needed for teachers and administrators in order to implement the agreed-upon changes.

What are the roles of board members, administrators, and teachers in such a process? The department offered these outlines of the roles various groups play:

Local governing boards and superintendents:

— Set policies to guide curriculum review and revision.

— Encourage support among the local business community, parents, and the general public for school improvement.
— Ensure that changes in district curriculum and school course content are made where necessary.
— Provide adequate resources such as staff support for curriculum review and revisions and funding for teacher training.

Curriculum specialists, principals, and classroom teachers:
— Compare district curriculum and high school course content with the standards.
— Examine student enrollment patterns to determine if all students are being exposed to a strong core curriculum.
— Make recommendations to the superintendent and governing board on needed revisions to the curriculum and course content.
— Organize and provide inservice training to support curriculum revisions.

Parents, the business community, and the general public:
— Become aware of and support schools in their effort to strengthen the high school curriculum.
— Help and encourage children in the home to master a more rigorous curriculum.

An Example

How might this process work at the school level?

State Supt. Bill Honig offered this example of how a high school, embarking on an effort to raise standards, might review and revise its reading program:

1. District staff and teachers in the English department meet to review the reading list, compare it with the recommended readings in the California Model Curriculum Standards, and decide which works will be studied when. The planners then develop course outlines and sequenced reading lists.

2. The planners construct two other lists — a list of great works that students read on their own [as a course requirement] and a list of works that students read mainly for enjoyment.

3. After deciding on a list of readings for general recommendation, the planners then specify certain works — for example, 100 works from various genres — that need to be read

before graduation, with college-bound students reading more complex works and greater numbers of works.

4. With support from the district, the English department, local colleges and universities, and professional development programs, the teachers decide how to teach the works on the reading list. Exemplary teaching techniques and ways of making literature vital and interesting to students are featured in the training and professional development programs.

5. Preservice and inservice training institutes are provided that help teachers investigate central works of the curriculum in depth and prepare to teach these works in new and challenging ways.

A spokesperson for the California State Department of Education concluded that the major need in implementing the new standards is the retraining of 7,000 teachers in each of the six content areas included in the standards. The Department, she added, is hoping for the passage of new legislation that would fund this training over a five-year period.

Note: For a copy of *Model Curriculum Standards: Grades Nine Through Twelve,* contact the California State Department of Education, Publications Sales, P.O. Box 271, Sacramento, Calif. 95802; $5.50 (plus tax for California residents).

Measuring Progress

How can districts determine if they are making progress as they strive toward higher standards? The criteria the U.S. Department of Education uses to evaluate nominees for the Secondary

School Recognition Program provides some clues.

The criteria include 14 "attributes of success":

- Clear academic goals.
- High expectations for students.
- Order and discipline.
- Rewards and incentives for students.
- Regular and frequent monitoring of student progress.
- Opportunities for meaningful student responsibility and participation.
- Teacher efficacy.
- Rewards and incentives for teachers.
- Concentration on academic learning time.
- Positive school climate.
- Administrative leadership.
- Well articulated curriculum.
- Evaluation for instructional improvement.
- Community support and involvement.

To measure how well high schools are doing, the program uses seven outcomes or indicators of success:

- Student performance on standard achievement tests.
- Student performance on minimum competency tests.
- Number of students who go on to postsecondary school, enlist in the military service, or find employment.
- Student and teacher attendance rates.
- Rates of suspensions and other exclusions.
- Student awards in academic or vocational competitions.
- Awards for outstanding school programs and teaching.

The seven junior high/middle school indicators are:

- Student performance on standard achievement tests.
- Student performance on minimum competency tests.
- Student success in high school.
- Daily student and teacher attendance rates.
- Rates of student suspensions and other exclusions.
- Awards for outstanding school programs and teaching.
- Student awards in academic or vocational competitions.

California Indicators

As part of its new accountability program, the California State Department of Education has established statewide targets for 1985-86, 1987-88, and 1989-90 in six areas ("quality indicators"):

- Increased enrollment in academic courses.
- Improved statewide test scores.
- Reductions in dropout rate and improved attendance.
- Improved performance of college bound students on the Scholastic Aptitude Test and Advanced Placement exams.
- Increased amounts and quality of homework and writing.

The idea behind the program is to maintain public support and prevent the use of only one measure (e.g., SAT scores) to judge the effectiveness of new reform measures. In addition, districts and schools are being encouraged to set and reach higher standards.

Here's how California State Supt. Bill Honig explains the need for the quality indicators:

"We are reaching a much closer consensus of what kinds of skills, knowledge, and character are necessary for our students to qualify for jobs and to develop into productive citizens. All members of the school community are working hard to translate this common vision into specific improvements in classes, schools, and districts. The general public has swung to our side and is demonstrating strong support for our reforms and a willingness to provide necessary resources and the time to allow the reforms to work.

"Over the next few years, we should be able to retain public support and receive necessary increases in school revenues *if* the public recognizes that we are committed to reforms and *if* we are able to demonstrate results.

"I believe it is crucial to announce *now* how the public should judge our progress. By defining a comprehensive set of accountability standards, establishing state targets, and initiating improvement efforts at each school and district, we gain the necessary breathing space with the public to prove what we can accomplish. We also avoid being judged solely by test scores alone or other less professionally sound indicators of performance."

Each school receives its own *Performance Report for California Schools.* The report consists of two parts: a common statewide data section and a local profile. The statewide section gives the school or district baseline information on each of the accountability measures, e.g., course enrollments and test scores, using currently available data. Thus, it allows schools and districts to see

how they compare with schools having similar populations and with the statewide targets.

One of the statewide targets, for example, is to reduce the statewide average dropout rate of 29.3 percent in 1983-84 to 23.5 percent by 1989-90. Another is to raise the 1983-84 statewide average of 421 on the verbal section of the SAT to 444 in 1989-90.

Using the data provided by the state and the data gathered locally, individual schools and districts can then establish their own targets based on statewide goals and devise strategies to reach those goals.

The *Performance Report* also provides information to assist schools in developing the local portion of the report. Here, schools would need to gather information such as:

- The quality of the curriculum.
- The atmosphere of the school.
- The amount and quality of writing.
- The number and types of books which students read.

Awards and recognition achieved by students, teachers, or the school.

- Community and parent participation.
- The amount and quality of homework.
- Participation in extracurricular activities.
- Nature and quality of support for students with special needs.
- Any other measures a school wishes to include.

In future years, both the current status and changes in relation to the initial data will be part of the schools' and districts' reports.

The state plans to recognize those schools and districts which have shown the most growth and those which exhibit exemplary achievement compared to schools with similar student populations through a "California School Recognition Program."

...attention to the quality of the education they receive.

"The present challenge is to teach successfully all of the diverse children who have become the active concern of our educational system. Although much public rhetoric focus-

...to our declining achievement and on the hope for a return to the standards of the past, today's goals cannot be met with the methods of the past. We must now make it possible for everyone to meet standards of educational performance that once were expected of a much smaller segment of the population. We want to raise average performance without sacrificing our traditional standards of excellence..."

Lauren B. Resnick
University of Pittsburgh
Improving Education: Perspectives on Educational Research

The education reform movement is bypassing the vast majority of the nation's "at risk" children, according to *Barriers to Excellence: Our Nation at Risk*, a report released in early 1985 by a "board of inquiry" created by the Boston-based National Coalition of Advocates for Students. The board was headed by Harold Howe, former U.S. Commissioner of Education, and Marian Wright Edelman, president of the Children's Defense Fund. The project was funded by grants from the Ford Foundation and the Carnegie Corporation of New York, among others.

The report, based in part on more than 100 hours of testimony in 15 cities, charged that many schools have failed to educate "those who are excluded from the mainstream of American life....

"The failure to educate millions of children is turning the potential for social profit into grave deficit, the cost of which American taxpayers will bear both financially and socially, in terms of increased dependency and the loss of a sense of common purpose."

Here are some of the board's major findings:

- **Education reform.** "Current education reform proposals fail to come to terms with the immediate employment issues for youth," it said. "Few if any of the reform recommendations speak to the need for a smoother school-to-work transition for the 25 percent of high school students who drop out and the 40 percent of high school graduates who proceed directly into the job market."
- **School finance.** The board said the income level of a child's family is the major determinant of the quality of education he or she receives.

• **Preschool programs.** Services for young children, the board noted, "are far from comprehensive or universal." The federal Head Start program serves only 18 percent of those children eligible for services, it said, and funding levels for state kindergarten programs are "often minimal."

• **Desegregation.** "Subtle forms of discrimination still exist in schools," the board charged. "From the minute they walk into school, many low-income students get the message that society does not really care about their education, that schools expect little from them." The board also said that it found widespread evidence of discriminatory tracking and disciplinary policies, as well as evidence of widespread misclassification of minority students as educable mentally handicapped.

• **Discrimination.** The panel said women face considerable discrimination in schools. Specifically, it cited the lack of services for pregnant teenagers.

• **Testing.** "Competency tests, which are often justified as a means of ensuring remedial help," the board charged, "do not guarantee that such help will be forthcoming." It added: "All children suffer when testing narrows the content of curriculum and promotes teaching to the test."

Recommendations

The board recommended:

• Continued government attention to "the rights of the disadvantaged and those discriminated against because of race, language, sex, or handicap."

• A greater willingness on the part of school administrators "to adjust schools to the needs of all students who attend them."

• More democratic governance of all schools in order to assure parents "a significant role" in making decisions about the education of their children.

• The establishment of comprehensive early childhood education and day-care programs, and in-school support services to prevent school failures.

• The enactment of more equitable and adequate systems for financing schools "so that quality of education does not depend on where a child lives."

• "Systematic" attention to the problems of jobs for youth, including dropouts.

Note: Copies of the report are available for $5.50 from the National Coalition of Advocates for Students, 76 Summer St., Boston, Mass. 02110.

Another Concern: The Future

In its 1983-84 Annual Report, the College Board raised another concern about the need to attain equity for students now and those of the future.

College Board President George H. Hanford said: ". . . We have a keen sense that, if the thrust for quality is not matched by a thrust for equality, the educational reform movement will fall short of its potential, and the true national need will not be met.

"This is true," he added, "if for no other reason than the rising proportion of minority young people in coming generations. [See the chart in this chapter.] By the next decade, these young people will, in fact, contradict their appellation and become the majority in most urban school systems. Therefore, they will be essential in meeting the nation's workforce needs at all levels including professional and managerial.

"The challenge," Hanford said, "is to change the educational system so that more students succeed, not because educational standards are lower but because the system does its job better and enables more students to meet higher standards.

"Equity," he asserted, "does not end with excellence for an elite. The opportunity to achieve or strive for excellence is, in fact, the right of all students."

Certainly all of the equity concerns mentioned in these reports deserve the attention of school administrators. Because of space limitations, however, this report cannot provide in-depth coverage of all of them. Instead, attention will be focused here on two issues: dropouts and vocational education.

Dropouts

Dropouts figure prominently in the conversations of many educators when they discuss the pros and cons of tougher academic standards.

Listen to Harold Howe, former U.S. Commissioner of Education.

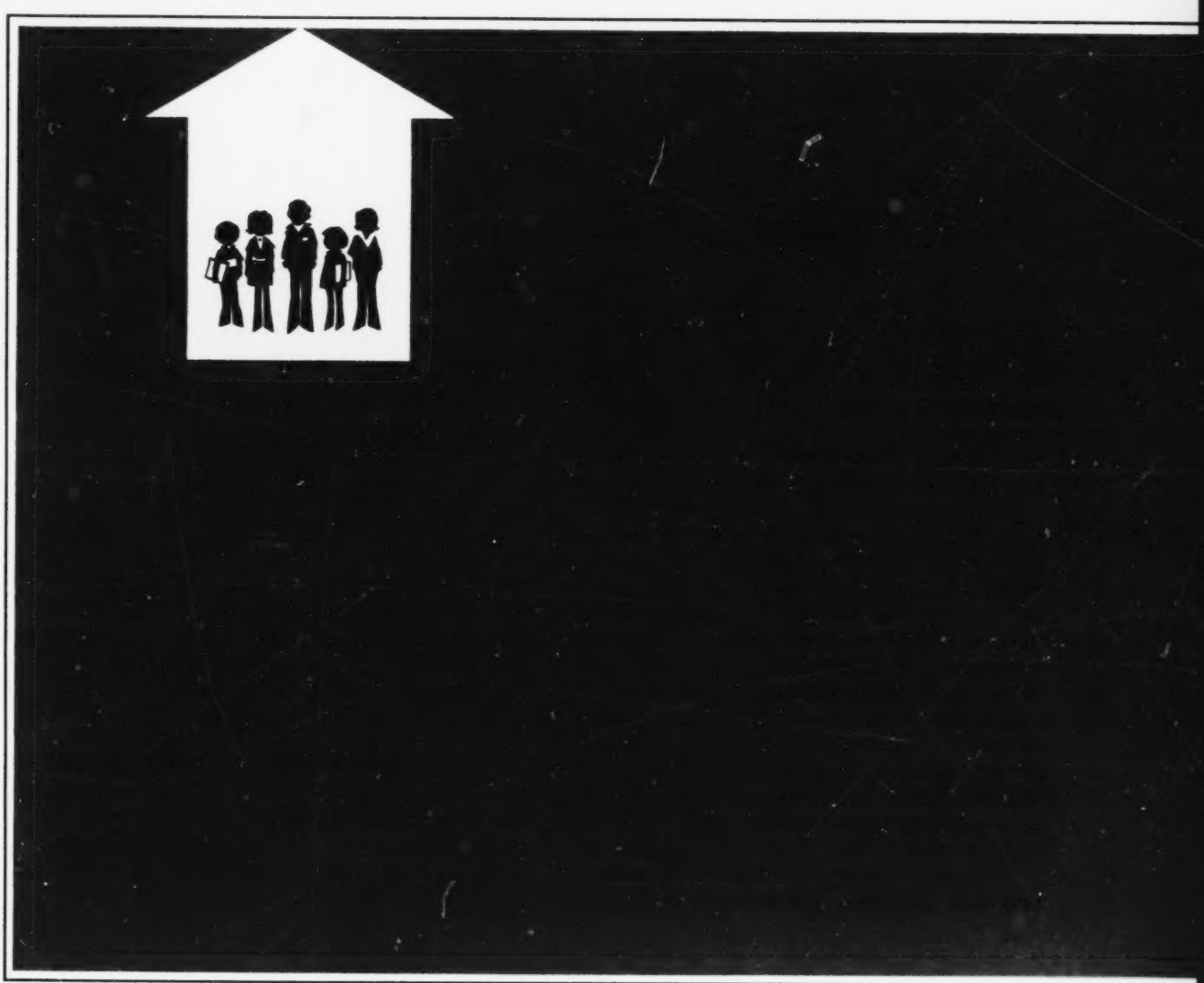
"The first question after the information on name and address found on most job application forms is, 'Do you have a high school diploma?' A young person without one has a permanent sentence to a limited life. As we make diplomas mean more in terms of learning, we must keep this issue in mind.

". . . We need a commitment by all responsible for schools that holding power is as important as test scores, maybe more so in big city schools, which can be seen as publicly supported institutions that fail with almost half their clients. If a hospital managed to kill off 40 percent of its patients, it would make the headlines. City schools leave too many of their students on the dump heap of the job market, which is painfully close to being economically dead.

". . . Our republic is in greater danger from the combined problems of school dropouts and youth unemployment than it is from academic deficiencies. Obviously both need attention, and solutions to both will have common elements."

Recent Findings

What is it that causes one student to do well in high school, another to do poorly; one to continue his or her education, another to decide to drop out?



Some concrete answers come from a federally funded project under the direction of Donald A. Rock, Educational Testing Service (ETS).

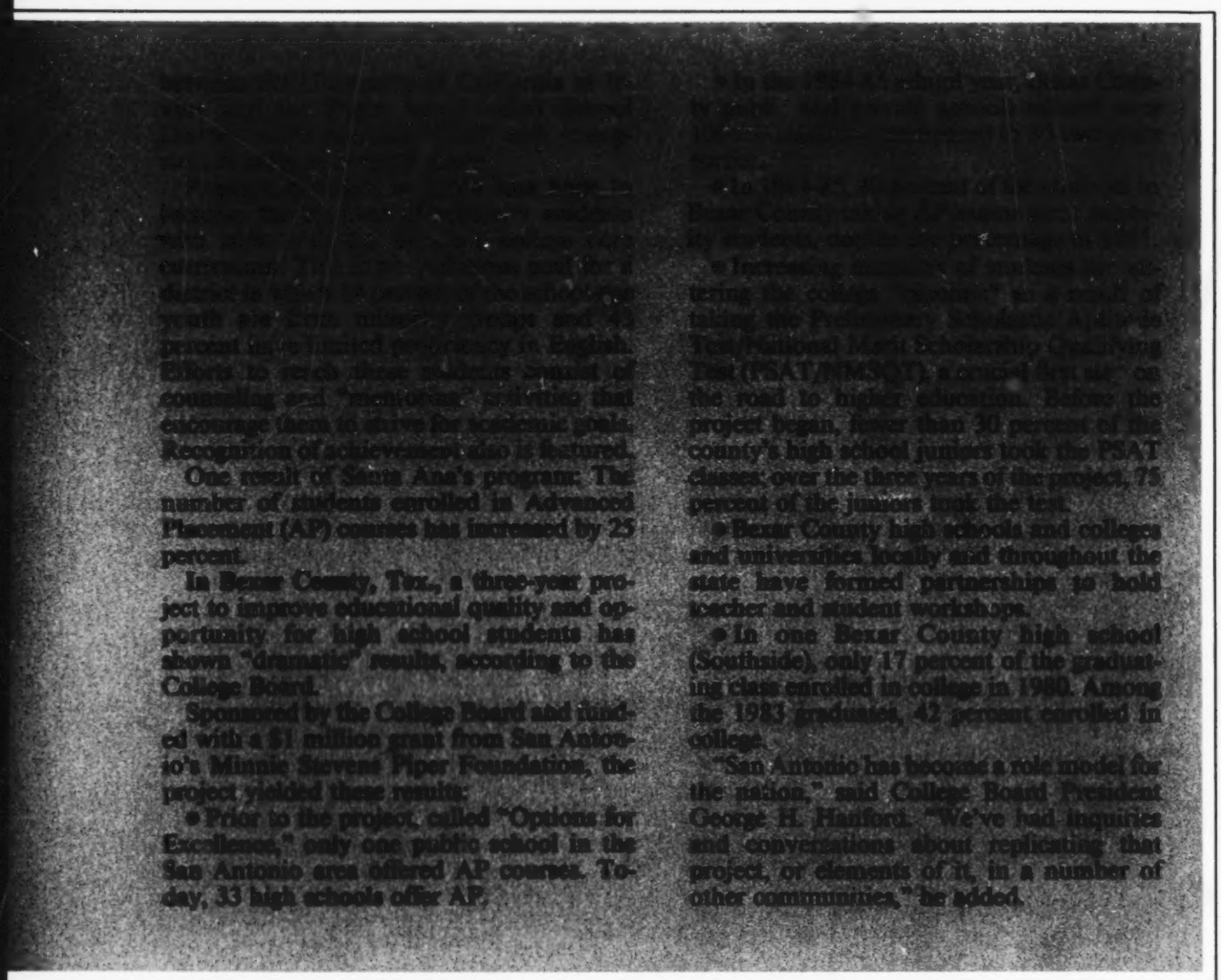
The answers are based on data from the first national longitudinal sample of high school students, specifically the High School and Beyond data base sponsored by the federal National Center for Education Statistics (NCES). It was designed to relate changes in the cognitive achievement and social development of high school students to their school experience from their sophomore through their senior years.

NCES data are drawn from a highly stratified national probability sample of about 30,000 high school sophomores who attended 1,000 public and private high schools in 1980. A follow-up survey retested and collected data from 22,000 of these students who were seniors in 1982 and 2,000 who had dropped out of school by 1982.

Profile of Dropouts

The ETS project said students who later became dropouts differed significantly from students who remained in school. Among the differences:

- They had lower test scores and lower school grades.
- They did less homework.



One result of Santa Ana's program: The number of students enrolled in Advanced Placement (AP) courses has increased by 25 percent.

In Bexar County, Tex., a three-year project to improve educational quality and opportunity for high school students has shown "dramatic" results, according to the College Board.

Sponsored by the College Board and funded with a $1 million grant from San Antonio's Minnie Stevens Piper Foundation, the project yielded these results:

- Prior to the project, called "Options for Excellence," only one public school in the San Antonio area offered AP courses. Today, 33 high schools offer AP.

- In the 1984 school year, more than [illegible] students took the Preliminary Scholastic Aptitude Test (PSAT/NMSQT), a crucial first step on the road to higher education. Before the project began, fewer than 30 percent of the county's high school juniors took the PSAT classes; over the three years of the project, 75 percent of the juniors took the test.

- Bexar County high schools and colleges and universities locally and throughout the state have formed partnerships to hold teacher and student workshops.

- In one Bexar County high school (Southside), only 17 percent of the graduating class enrolled in college in 1980. Among the 1983 graduates, 42 percent enrolled in college.

"San Antonio has become a role model for the nation," said College Board President George H. Hanford. "We've had inquiries and conversations about replicating that project, or elements of it, in a number of other communities," he added.

- They had lower self-esteem and less sense of control over their lives.
- They had more disciplinary problems in school.
- They dated more frequently and spent more time driving and riding around.
- They had parents who were less likely to know what the students were doing.

Here are the major reasons for dropping out of school, as reported by the former students themselves in 1982:

Percent of Dropouts	Reason Given
33%	Did not like school
33%	Poor grades
20%	Offered a job and chose to work
18%	Getting married
16%	Could not get along with teachers

Note: Nearly one-quarter of the female dropouts cited pregnancy as a reason for leaving school.

Problems

The ETS researchers pointed out the uneven access to school processes that affect gain. "Although access within schools does not appear to favor one racial/ethnic group over another, students attending schools with a low SES (socioeconomic status) student population are exposed to a different set of educational opportunities than are students attending school with a high SES population."

For example, the researchers said, fewer students in a low SES school are enrolled in the academic curriculum track; fewer advanced academic courses are offered; fewer math, science and foreign language courses are required of college preparatory courses; rates of absenteeism, suspension,and disciplinary problems are higher; and the school has less money to spend on educational programs.

The researchers noted that blacks and other minority students are nearly four times as likely to attend low SES schools than are white students. In 1980, for example, 12 percent of the white and 46 percent of the black, Mexican American, and Puerto Rican high school sophomores were enrolled in such schools. In contrast 30 percent of the white and only 10 percent of the minority students attended schools with a high average SES student population.

What Should Schools Do?

The ETS researchers said their findings suggest that schools should direct their policies toward improving the schools and toward equalizing access to educational opportunities in all schools. More specifically, they said, school policies should address:

- Strengthening the family role in providing a home environment that encourages learning — a place to study, parental interest in the school and in the student's educational progress, and opportunities for nonschool learning experiences — and helping students understand that they can influence their future through their own educational efforts.
- Encouraging schools to increase their expectations for students' educational performance, including the amount of homework done, and for maintaining classroom behavior.
- Requiring students in the general education and vocational education curricula to take more non-remedial and non-functional courses in the "New Basics" (as identified in *A Nation at Risk).*
- Continued provision of remedial and basic skills programs for students who enter high school with educational disadvantages, with an increased emphasis on the development of language skills, especially vocabulary.
- Enriching curricular offerings in low SES schools and equalizing resources across all schools.

School Factors That Help Students Succeed

School factors that contribute to achievement gains of high school students were identified by ETS researchers. In a briefing paper released in the spring of 1985, they concluded that the contributing factors for students who remain in school through their senior year are as follows:

- **The academic emphasis of the school.** Gains were greater in those schools where a large percentage of students were enrolled in the academic curriculum and which offered a large number of non-remedial courses in the "New Basics."
- **The climate of the school.** Students showed

Resident Population By Race: 1960-1983 And Projected 1985-2000

Race	1960	1970	1980	1981	1982	1983	Percent Change 1960-83
All Races	179,323	203,235	226,546	229,348	231,534	234,458	30.8
White	158,832	178,098	194,811	196,664	198,108	199,880	25.8
Black	18,872	22,581	26,431	27,153	27,569	28,215	49.5
Other Races	1,619	2,557	5,304	5,530	5,857	6,364	294.7

Race	1985	1990	2000	Percent Change 1985-2000
Total	238,648	249,781	267,980	12.3
White	202,237	210,964	222,801	9.6
Black	29,107	31,452	35,755	23.0
By Age, All Races				
Under five	18,462	19,200	17,624	−4.5
5-17 years	44,352	45,123	49,763	12.2
18-24 years	28,715	25,773	24,590	−14.4
25-44 years	73,779	81,351	80,108	8.6
45-64 years	44,668	46,981	60,873	36.3
65 years and over	28,673	31,799	35,036	22.2
16 years and over	183,034	191,901	208,223	13.7
18 years and over	175,334	185,409	200,604	14.1

Source: National Center for Education Information. Basic data from U.S. Bureau of the Census, *Statistical Abstract of the U.S. 1984.*

larger achievement gains in schools that reported few disciplinary problems and where a lack of parental interest in the school was not considered a problem.

- **Student ratings of their schools.** Students were asked to rate the quality of their teachers and of the instruction that they had received. Achievement gains were greater in those schools with higher average student ratings.

- **Course exposure.** In each achievement area, the number of courses that a student took beyond the remedial or functional level was positively related to test score gain.

- **Homework.** Other things being equal, students who did more homework showed greater test score gains.

- **Curriculum.** Students enrolled in the academic curriculum showed greater gains than did students enrolled in the general curriculum, and both groups did better than students in the vocational track. This is due primarily to variations in course-taking behavior by students in the different curricula. The average number of non-remedial courses in the "New Basics" was highest in the academic curriculum, followed by the general and then by the vocational curricula.

"Other things being equal," the researchers added, "these variables have a similar impact on achievement gains for all groups of students, whether white or black, male or female, or enrolled in a public or in a Catholic school."

Vocational Education

"All educators should be concerned about the implications of current curricular reforms

for students who do not plan to attend a four-year college or university, for students who have difficulty succeeding in academic courses, and for secondary vocational education courses and programs.

"We need to carefully consider the unintended consequences of emphasizing 'the New Basics.' We must be certain that we are providing appropriate reinforcement and remediation for those students who need it. Meanwhile, emphasis on the basics ought not to preclude experiences with vocational education and applied learning."

— Linda S. Lotto
Assistant Director for Planning
National Center for Research in
Vocational Education
Ohio State University

In the paragraphs above, Lotto captured the concerns of the National Commission on Secondary Vocational Education as detailed in its 1984 report, *The Unfinished Agenda.*

Those concerns are shared by school administrators. Many of them noted in their responses to the AASA survey for this report that imposing tougher graduation requirements and a core curriculum for all students would adversely affect non-college-bound, vocational students.

These students, many educators argue, deserve as much attention to their needs as do college-bound youth.

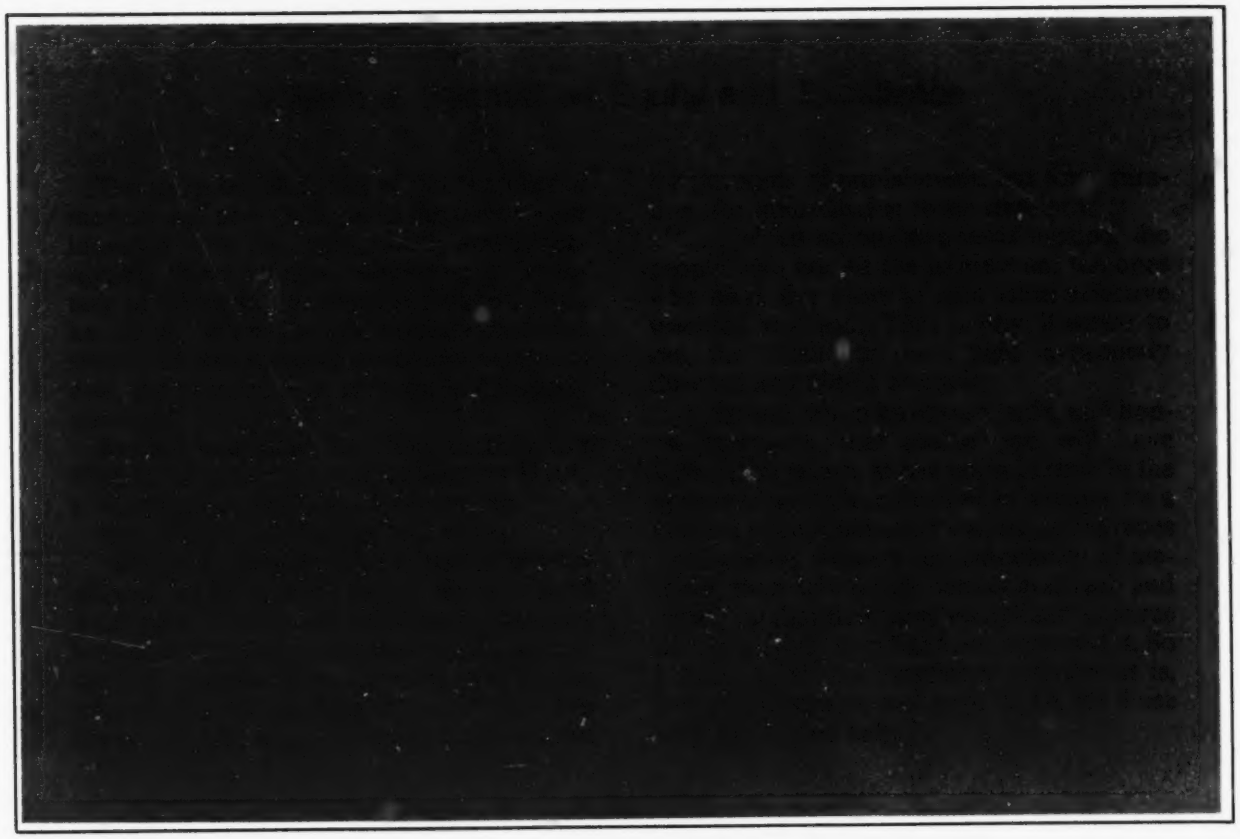
Yet, as noted by Lotto:

"Vocational education is being squeezed out of the secondary school curriculum. Increased emphasis on academics makes the problem of access to vocational education particularly acute. As states and local school districts move to increase graduation requirements, the time available for electives — including vocational courses — shrinks."

In the April 1985 issue of *Phi Delta Kappan* magazine, Lotto summarized additional concerns and the recommendations of the Vocational Education Commission:

Concerns

- Secondary vocational educational programs



generally hold a position of low status within the secondary school.

- The greater emphasis on academic subjects will support a move by many school districts to concentrate their scarce financial resources on the academic areas.
- Access is clearly a problem for students who wish to take part in vocational education. Many of the best vocational courses are offered in magnet schools, area skills centers, or regional vocational schools. But access to many of these programs has become competitive (with admission determined by faculty recommendations and proficiency in the basic skills) and is dependent on a student's ability to schedule class and travel time.
- Secondary vocational education courses and programs are often used as dumping grounds for less-able or disruptive students who are not succeeding in academic courses.
- Vocational education students score significantly lower on standardized tests of proficiency in basic skills than do students who are enrolled in academic programs.
- Roughly 24 percent of all secondary vocational teachers in the U.S. are hired to teach only part-time.

Recommendations

The Commission's top recommendation is that vocational education should become coequal and complementary to academic education within the secondary school. What's needed, it said, is an integrated secondary school curriculum that includes complementary academic and applied experiences.

In addition, it recommended:

- All students should be able to choose from a comprehensive set of course offerings across academic and vocational areas.
- The content of vocational courses should be upgraded and made more rigorous.
- Vocational courses should include more instruction in the basics.
- Students should be allowed to use vocational courses to satisfy graduation requirements in academic subject areas.
- Individualized employability plans should be established for all students, in order to better coordinate instructional support services and career planning.
- Schools should find ways to enhance guidance and counseling programs and to reduce the physical and social segregation of students who are enrolled in vocational courses and programs.
- The range of students who take part in vocational courses should be expanded — to include not only youngsters enrolled in the academic track but also those with handicaps or limited proficiency in English.
- The preservice preparation of teachers should be improved, with heavy reliance on recent research findings related to teaching, learning, and instructional technology.
- Teachers' credentials should be standardized to require both a baccalaureate degree and work experience for all teachers. "This would be a strong step toward reducing the differences between vocational and academic teachers."
- Articulation and coordination agreements are needed with nearby school districts, community colleges, postsecondary vocational schools, private vocational schools, community-based organizations, training programs sponsored by the Job Training Partnership Act, apprenticeship programs, and the military.

For a copy of *The Unfinished Agenda,* contact the National Center for Research in Vocational Education, Ohio State University, National Center Publications, Box F, 1960 Kenny Rd., Columbus, Ohio 43210.

An Answer

A proposal to achieve excellence in vocational education comes from Ruth P. Hughes, professor and head of home economics education at Iowa State University.

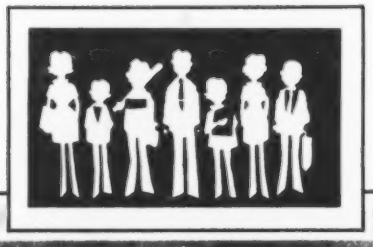
In a policy paper directed toward policy makers at the federal, state, and local levels, Hughes concluded that the best answer among four possible alternatives is to integrate vocational and academic programs.

This alternative, she said, would provide a direct response not only to the national call for excellence but also to recommendations for the establishment of a common curriculum.

This alternative, Hughes proposed, should be modeled after a program started in New York State that provides for three components within the same organization:

1. Academic basics.
2. Opportunity to study and explore occupations and to acquire employability skills.
3. Preparation for employment.

The first two, she noted, are for all students; the third is for vocational majors only.



Schools Must Prepare for a Changing Population

The education reform movement must contain a "thrust for equality" to match the "thrust for quality," according to George H. Hanford, president of the College Board.

This is especially important, he said, because of the rising proportion of minority young people in future generations.

Here are some of the demographic changes, as detailed by C. Emily Feistritzer in *Clearing Our Children: Why We Need School Reform* (National Center for Education Information, 1901 Pennsylvania Ave., N.W., Suite 707, Washington, D.C. 20006; $14.95):

- The new baby boom is non-white. The number of white children under age 5 in the total population decreased 2.7 percent (14,464,000 in 1970 to 14,075,000 in 1982). Black children in this age group showed an 11.6 percent gain, from 2,434,000 to 2,717,000.
- From 1970 to 1982, the number of white children between 5 and 13 years of age dropped 19.8 percent. Figures for the same age group of black children showed a 9.9 percent drop. Numbers of all children between 14 and 17 years decreased 5.6 percent, representing a 9.1 percent decline among white and 7.1 percent *increase* for black children 14 to 17.
- For all age groups, the black population increased 49.5 percent from 1960 to 1983, the white 25.8 percent, and other races, 294.7 percent.
- The percentage of black Americans increased from 11.1 percent in 1970 to 11.7 percent in 1980, and the percentage of persons of Spanish origin from 4.5 percent to 6.4 percent. From 1970 to 1980, the black population increased by 17.3 percent. Other increases: American Indians, 71 percent; Chinese, 85.3 percent; Filipinos, 125.8 percent; Japanese, 18.5 percent, and Korean, 412.8 percent.
- The white population in the United States increased by only 6 percent from 1970 to 1980. Still the overwhelming majority, it nevertheless dropped, as a percentage of total population, from 87.4 percent in 1970 to 83.2 percent in 1980.
- Hispanics are the fastest growing minority group of significant size in the United States. Their numbers increased by 61.0 percent — 9,294,500 in 1970 to 14,609,000 in 1980. In both 1970 and 1980, more than 60 percent of the nation's Hispanics lived in California, Texas, and New York.
- Total population of the U.S. will grow 12.3 percent from 1985 to 2000, with the white population increasing 9.6 percent and the black, 23 percent. For the school-age category (ages 5-17), a 12.2 percent increase is projected for the period 1985-2000.

See chart in this chapter for more detail.

Legislation to make the proposal a reality, Hughes said, should provide for the following:

- Developing a core vocational/career curriculum for all student between grades 6 and 10. This should include content in five areas:

— personal development (personal skills, health, decision making, inter-personal relationships, career exploration, work habits);
— social systems (family, community, economic, political systems);

— information skills (communication, reading, speaking, keyboarding);
— resource management (use of time and money, consumer skills, natural resources);
— technology (use of materials and processes, tools and equipment, safety).

- Including the study of career opportunities in the core curriculum.
- Providing for occupational preparation in grades 11 and 12 through access to at least five programs or clusters.
- Providing additional instruction for those with special needs and/or providing for adaptation of programs to meet needs of special populations.

In backing this alternative, Hughes argued that "separation of vocational and academic students must occur at some point if secondary education is to serve those who do not intend to get further formal education.

"Classes in trigonometry, physics, and advanced foreign languages will not serve all students," she said, adding that "this creates a major need to find other ways to serve them.

"Yet," she noted, "if a good general education is needed by everyone — and there is general agreement on this — then we must seek a way to provide a good general education for all, and vocational preparation for those who want or need it."

Note: A copy of *Secondary Vocational Education: Imperative for Excellence* may be obtained from the National Center for Research in Vocational Education (The Ohio State University, 1960 Kenny Rd., Columbus, Ohio 43210; $4.95; 1984).

In late 1984, the National Association of Elementary School Principals (NAESP) released the first comprehensive set of standards for grades K-8. Previously, the association had never defined either a quality school or a quality preparation program for elementary and middle schools.

The new standards are the result of a year-long effort by NAESP's Standards Committee to define the factors that make the difference between a successful school and one which needs a change of direction.

The standards are based on a large body of recent research on effective schools and the "practical insight and knowledge that principals have gained through years of experience," NAESP says.

Significantly, the standards document contains assessment and planning instruments that can be used to measure progress in meeting the standards.

There are actually 21 standards included in the document, arranged in seven categories: Organization, Leadership, Curriculum, Instruction, Training and Development, School Climate, and Evaluation and Assessment. Each standard includes "quality indicators" (167 in all) which describe specific things to look for in determining the degree to which a school meets a standard.

The standards under the category, "Organization," include:

- There is a written statement of the school's beliefs and goals.
- Sufficient numbers of well qualified personnel are provided to fulfill the school's goals.
- Placement and grouping practices are determined by student needs.
- Sufficient time is allocated to accomplish the school's educational objectives.

Following are the "quality indicators" included under the standard, "Sufficient numbers of well-qualified personnel are provided to fulfill the school's goals":

- Staff members are qualified by training and background for the positions to which they are assigned.
- Each school has its own full-time principal.
- Classroom teachers are assigned to the school on a maximum 20:1 pupil/classroom teacher ratio.
- Actual pupil/classroom teacher ratio may vary from class to class with younger children receiving priority for a lower ratio.
- Instructional specialists are assigned based on student needs and programs (i.e., art, music, physical education, reading, media specialists, and others).
- Other professional staff are assigned to the school based on student needs (i.e., nurse, psychologist, social worker, counselor, special education teachers).
- Classified staff are provided commensurate with the size of the school and the nature of its programs (i.e., secretarial, custodial, paraprofessional, cafeteria).
- When student enrollment reaches 400, additional administrative assistance is provided to the principal.
- Parent and community volunteers play an active role in the school's program.

Uses

NAESP cites two uses for the standards:

1. To give states, school districts, boards of education, and citizens a means for determining the degree to which their schools possess the ingredients necessary for achieving educational excellence.
2. To help individual principals assess the status of their schools as the starting point for a comprehensive, continuing effort aimed at enhancing educational opportunities for their students.

Misuses

NAESP notes: "Since each school's student enrollment comprises a unique blend of distinctive human beings and local conditions, the standards cannot validly be used to compare one school's performance with that of another.

"Nor should an assessment based on these standards," it adds, "replace the formal self-study required for regional school accreditation."

Implementation

The standards suggest that principals follow this approach in developing an improvement plan:

1. Record a consensus judgment of the extent of improvement necessary to fully meet each standard.
2. Identify plans for improvement.
3. Assign priority rankings to each of the improvement plans developed in step 2.
4. Assign target dates for completion of planned improvements in each standard area. Note: A master timeline, incorporating all target dates, would be helpful. It can serve as a constant reminder of the tasks which are completed as well as those which remain to be done.

Acceptance: NAESP's Margaret Montgomery said in an interview for this report that the standards have received "very positive" acceptance across the country. Several state principals associations, she noted, are using the standards to review their own positions on standards or to set up training sessions for principals.

The future. As this report was going to press, NAESP was working on what it calls "the second part" of the standards project: determining the proficiencies (skills and knowledge) principals need to implement the standards. To do so, principals must understand, for example, various methods of grouping students and they must have human relations skills. NAESP plans to release information on these proficiencies in late 1985.

For more information or a copy of *Standards for Quality Elementary Schools: Kindergarten Through Eighth Grade* ($8.50), contact the National Association of Elementary School Principals, 1920 Association Dr., Reston, Va. 22091; 703/620-6100.

District Actions

Although most of the recent reform reports concentrated on the secondary school, some experts say this is not enough. They argue that the elementary school deserves attention because it is here that students lay the groundwork for all that follows.

Responses to the survey for this Critical Issues Report indicated that many districts around the country are taking a look at the program provided to K-8 students. New standards are being set; reforms are under way.

Here's a sampling of some of the actions they are taking:

- Involving parents in their child's education.
- Telling parents what's expected of students at each grade.
- Identifying "high risk" students and providing special attention and services.
- Monitoring students; establishing learning contracts.
- Using tests for diagnosis.
- Retaining students.

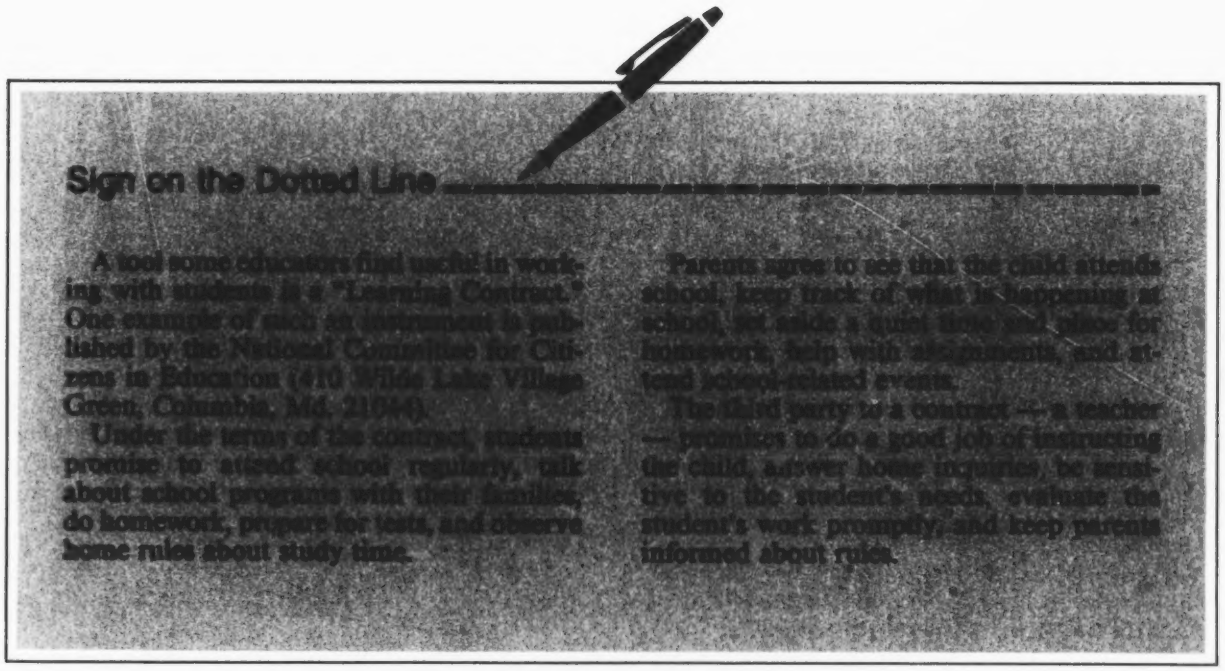
More details on these actions follow.

Involving Parents

A promising trend at some elementary schools is the effort to involve parents more deeply in their children's education. As Herbert J. Walberg explained in an article in *Phi Delta Kappan,* children certainly spend more time at home than in school. "Not only is this fraction [of time] far larger than the amount of time spent in school, but it strongly influences the productivity of school time."

Here are some examples:

The Ponca City (Okla.) Public Schools try to involve parents by sending home a task sheet for each grade level which asks parents to "please set aside a certain amount of time each day to help



your child complete homework." Parents are also advised to spend time on activities such as encouraging the child to bring home papers and share them, helping with homework and providing a suitable time and place for it, encouraging the child to read with them *every* night, helping the child tell time on a clock, reviewing addition and subtraction facts and spelling word lists, practicing cursive letters, and helping the child read signs.

The Tuscaloosa (Ala.) Public Schools publish a *Scholar's Handbook,* which gives parents practical tips on keeping their children in good shape for studying. The booklet includes time charts for students to fill in that show how they spend the hours of the day, thus teaching time management. The booklet also contains information about developing study skills, often a great need for elementary — and high school — students. Tips on taking notes and reading are also included.

Resource: Schools interested in helping parents help their children in school may want to make parents aware of a booklet, *How To Help Your Children Achieve in School,* published by the U.S. Department of Education's National Institute of Education (NIE). It includes tips on teaching youngsters how to pay attention and how to learn, remember, and take notes.

"Successful students develop certain skills and attitudes that are lacking among the less successful," said former NIE Director Manuel J. Justiz, explaining why the booklet was written. "The booklet pinpoints these skills and attitudes. For example, good students have a clear sense of responsibility for their own learning. They learn to focus their attention and ignore distractions. They learn to study in a comfortable way without too much stress."

A copy of the 20-page booklet is available for $3.75 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Telling Parents What's Expected

Each fall, the Benton Harbor (Mich.) School District gives parents a document listing the minimum skills that must be mastered at their child's grade level. It is part of the district's promotion gates policy.

To pass kindergarten, Benton Habor youngsters must master nine reading skills — writing their first name; indicating positions (top, bottom, under, between); knowing basic colors and at least 10 letters of the alphabet; recognizing pictures, letters, and words that are alike and different; indicating objects in a picture that can be grouped together; selecting the picture that

best describes a story or sentence; reciting a four-line nursery rhyme; and following two verbal directions in the order they are given. In addition, they must master a given level of their language arts program.

To be promoted from the fifth grade, students must be able to identify the correct dictionary definition of a multiple-meaning word that best fits the context of a sentence; infer cause-and-effect relationships in a reading selection; order the events in a selection in correct sequence; identify an author's point of view; draw conclusions from traits of literary characters; construct correct sentences; and use nouns, pronouns, verbs, adjectives, and adverbs, as well as punctuation, correctly.

A given number of mathematics skills must also be mastered at each grade level for promotion. Kindergarten children must, for example, be able to compare the size of objects or pictures; select shapes and numerals that are alike and different; know the shape of a circle, square, triangle, and rectangle; count objects to 10 and rote numbers to 20; perform various tasks with

Are Reformers Backing the Wrong Horse?

Governors and education policy makers, "in betting their reform dollars at the secondary level, may be backing the wrong horse," according to Samuel G. Sava, executive director of the National Association of Elementary School Principals (NAESP).

"Both research and common sense indicate that genuine, permanent reform must begin at the preschool and elementary levels, with a *concentration of resources* in those years to make certain that youngsters have a firm grip on the basic tools of learning," Sava writes in the January 1985 issue of *Principal*.

He cites two studies to back up his convictions:

The Perry preschool program conducted in Ypsilanti, Mich., in the 1960s. A total of 123 black children from low-income homes were divided into two groups: a control group of 65 who would receive no special attention, and an experimental group of 58 who would attend preschool for 12½ hours a week for 30 weeks over one or two years. In addition, teachers visited the homes of the experimental youngsters for 90 minutes a week, teaching the parents how to use common household materials and everyday events to help the children learn.

The researchers kept track of almost all of Perry's alumni for 15 years — until they were 19. They found that, although a 12-point IQ gain among the experimental group had disappeared by second grade, the two groups still differed in these ways when both had become young adults:

- 67 percent of the preschool group had graduated from high school, as opposed to 47 percent of the control group.
- 58 percent of the former preschoolers had jobs, compared with 32 percent of the control group.
- Only 17 percent of the former preschoolers were on welfare, as opposed to 37 percent of the control group.

In the second study, the scores of all 64,000 eighth graders on the Tennessee Basic Skills Test were checked and then correlated with kindergarten attendance. The finding: the 66 percent who had attended kindergarten — from every socioeconomic level, and from programs ranging from good through indifferent to bad — clearly exceeded their classmates in academic performance eight years later.

Sava calls on educators and reformers to (1) "overcome our habit of expecting every good educational idea to produce dramatic results tomorrow morning" and (2) pay attention to early childhood education and "the importance of the long-neglected elementary school."

the numbers between 0 and 10; and master the beginning level of their mathematics program.

Computer printouts sent to parents during the year show which skills the children have mastered. If, by March, there is a possibility that a child might be retained, the parents are notified. Two regular parent conferences also are held each year.

Although the district retained 22 percent of its K-2 students in the spring of 1982, there were few complaints from parents. The reason: They had been involved in developing the program and were kept posted on its progress.

After summer school that year, the retention rate fell to about 15 percent. In June 1984, the overall rate was about 14 percent (although additional grades have been added to the program each year).

Early Identification of Problems

At the Bay Shore (N.Y.) Union Free District, goals call for 90 percent of all students in the class of 1987 who have attended school in the district for at least six years to pass the New York Regents Competency Tests (excluding special education students). Here are the steps the district is taking to assure the goal is met:

1. A system for "early identification" of students who appear to be "high risk" for passage of the Preliminary Competency Examination was implemented. During the 1982-83 school year, all third-grade students and sixth grade students were screened to determine their potential for passing state competency exams.
2. During the 1983-84 school year, all students identified as "high risk" for failing the exams were provided with a program of remediation.
3. All students who fail the competency exams are further screened to determine their need for educational evaluation in order to insure effective program placement.
4. During the 1984-85 school year, all students who failed the competency examinations during the 1983-84 school year, and were found ineligible for special education, will be provided with an intensive course of remedial education to help them pass the tests.

Monitoring, Learning Contracts

At the Mendham Township School District, Brookside, N.J., any student who receives a failing grade in an academic subject is "monitored." In addition, a conference is held with the child's parents, at which the student is asked to sign a "contract" that sets out his or her educational goals. Each academic teacher makes a weekly report on the student's progress, discussing its content with the student and sending it home for parental acknowledgement.

Using Tests for Diagnosis

While educational reform spokespersons stress the value of basic skills competency testing, they also emphasize the importance of using test data from other sources to help keep track of how children are doing.

"Most school districts have an achievement testing program, but no one may be checking test scores to see if they indicate that children have problems," explained Ramsey Selden, senior research associate for the National Commission on Excellence in Education.

"Textbooks have tests that accompany them," he continued, "but those tests may not be used either. Too often," Selden said, "testing programs are not coordinated, and districts end up with a vague articulation of student progress."

Using test data from a variety of sources, experts say, permits districts to get better information for making promotion decisions, diagnosing learning problems, and identifying youngsters who should be in accelerated programs.

Some districts are using their test data in this way.

In Benton Harbor, Mich., for instance, students not only must pass basic skills tests for promotion but also must master a given level in basal reading and mathematics.

In Falls Village, Conn., principals study the achievement levels of youngsters — especially low achievers — on the Iowa Test of Basic Skills. They then work with staff to prepare and plan the individualized programs that are evaluated at the year's end to determine their effectiveness.

At the Alamo Heights School District, San Antonio, Tex., educators keep track of students' progress through the Texas Assessment of Basic Skills, a criterion-referenced minimum competency test, and the California Test of Basic Skills, a norm-referenced test that measures overall achievement.

(Note: A *norm-referenced test* typically covers a broad area of achievement and is used to measure individual differences in achievement. The results allow schools to compare an individual

student's performance to that of some known group (to be able to say, for example, that the student ranks 10th in a group of 20). A criterion-referenced test focuses on a limited set of learning tasks and is used to determine which of those tasks a student can perform. The results of this type of test allows schools to say, for example, that the student demonstrated mastery by defining 90 percent of the technical terms on the test.)

"The two tests provide very different information about our students' academic development," noted the district's *Five Year Program for Academic Progress.* A student may have mastered the basic skills, but be working at a marked disadvantage in relation to his or her peers." School officials in San Antonio strongly recommend summer school for children with low scores on the California test (the students must pay a fee). They require summer school (at no charge to the student) for youngsters who lack basic competency skills.

In Nashville, N.C., although a teacher's opinion is the most important factor in student retention decisions, additional information also plays a role. Students in grades 1 and 2 may be retained if they have not mastered the required level of the basal reading program; students in grades 3-6 may be held back if their latest standardized achievement test score is below national norms for grade-level achievement.

Note: Authorities emphasize that tests should be correlated with a district's learning objectives, especially if the results are to be tied to promotion decisions.

Retaining Students

Many districts are trying to assure that students learn basic skills by grade 8, leaving high school time free for higher learning.

One method being used by some districts is the establishment of "promotion gates" at key points in the elementary grades. These districts have abandoned social promotion based on age and have put in its place a system in which students advance only after mastering specific skills.

Student retention remains controversial. Some researchers argue, for example, that the process does more psychological harm than educational good (especially if the student has the same material, taught the same way, for another year). On the other hand, some administrators are convinced that the threat of retention gives students a much needed motivational boost.

Mobile, Ala. Eighth graders must pass a test, required since 1978, that demonstrates mastery of sixth-grade reading and math skills.

"Students take school more seriously, while teachers feel pressure to produce, which has caused them to work harder," said Herman R. Shoemaker, director of employee relations for the Mobile schools, in an interview for this report.

Reading scores for the district are now above national norms at all grade levels. And complaints from parents of retained students have dropped to a minimum, he added. The gains have come despite the fact that expenditures for the district are below the national average, according to school officials.

Washington, D.C. In the District of Columbia, where schools started testing students in grades 1-3 in 1980, achievement scores rose dramatically when a promotion gates policy was adopted. Now, most children in grades 3 and 6 are scoring at or above national norms.

Children in the elementary grades take basic skills tests twice during the school year, and those who don't measure up are held back and given special remediation.

In January 1981, when grades 1-3 were first tested, only 61.2 percent of the students were promoted, a figure which rose to 83.6 percent in June of the same year. When grades 1-6 were tested in the spring of 1984, nearly 93 percent met the requirements. "Our standards have not changed," insisted Herman Cobb, director of evaluation for the district. "There has been no easing up at all."

Cobb attributed the program's success to strong remedial efforts. As soon as the promotion policy was adopted, reading and mathematics resource personnel were assigned to each school to provide remedial help. Each school had to submit a comprehensive remedial plan to the central office explaining how it would use both resource people and volunteers, recruited through "Operation Rescue," an appeal to the community for people to help with tutoring and other tasks.

When students in Washington are held back, school administrators try to place them in a continuous progress plan, where they work at the level they have reached, rather than starting the entire year over. All students who might have academic problems are urged to attend summer school.

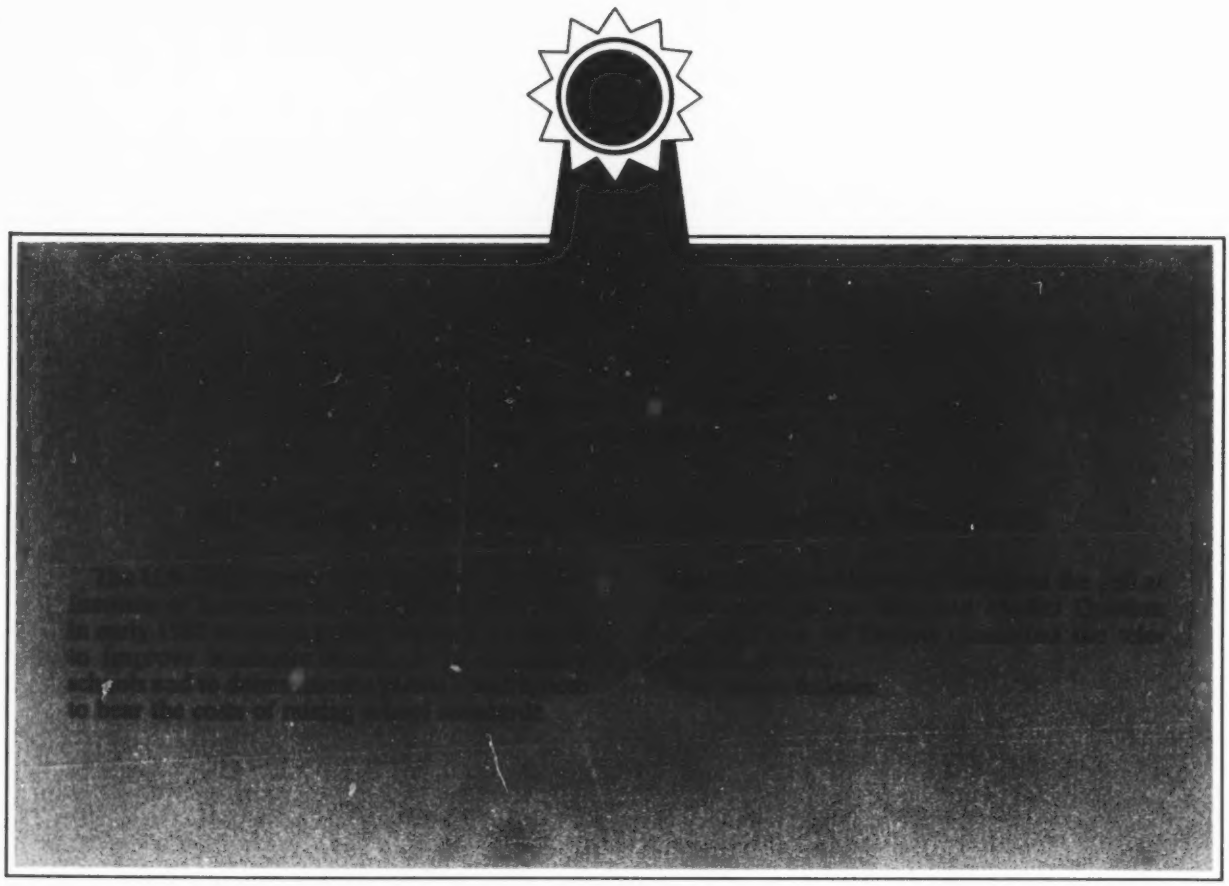
Early complaints from teachers about the large

amount of paperwork the system requires have fallen off. "Teachers' attitudes have really changed," Cobb said, "and parents bought into it as soon as they saw results."

A concern: multiple holdovers. The district is concerned about what to do about sixth graders who have already been held back one year and still have not passed the tests. In 1983, three junior high schools conducted a pilot program for some students who were chronologically out of synchronization with their grade level. These students were placed in "academic preparatory" schools — schools-within-a-school — where they had one teacher for a full day, but still had some contact with other youngsters their age.

The district is also experimenting with a smaller project that ties career exploration and critical thinking together in a special program for retained students.

Some retained students, whose diagnostic test scores reveal learning problems, are placed in special education classes.



Level of Public Support for Standards-Raising Initiatives

Should your local high school take this action? . . .	**%yes**	**%no**	**no opinion**	**% who prefer this action to other choices**
Require students to pass high school graduation exams in reading and math.	95.1	4.3	0.7	35.5
Require students to pass junior high promotion exams in reading and math.	95.2	4.0	0.8	13.5
(a) At least **two-thirds** of the classes students take should be required courses.	82.5	12.6	4.8	NC
(b) At least **one-half** of all classes should be required courses.	91.5	2.6	5.9	5.2
Limit the size of all academic classes to 25 or fewer students.	85.5	10.9	3.6	6.4
Design system of rewards and penalties to reduce unexcused absences from school.	84.9	10.6	4.4	NC
Require teachers to pass state or national teacher exams.	83.9	10.5	5.6	NC
Have teachers spend one month each summer doing things to improve their teaching.	80.9	15.3	3.8	7.2
Increase the average salary for teachers to at least $25,000.	73.8	19.6	6.6	3.8
Assign at least 1½ hours of homework every day.	71.0	26.8	2.3	3.5
Pay outstanding teachers higher salaries than other teachers with the same seniority.	66.6	26.4	7.0	3.3
Students who disrupt class activities day after day should . . .				
(a) remain in regular classrooms	15.9	77.2	6.9	NC
(b) be assigned to alternative classrooms	64.7	25.9	9.4	2.4
(c) be expelled from school	10.0	80.6	9.4	NC
Increase the length of the school day by one hour.	45.8	50.8	3.4	0.6
Almost all required courses should focus on academic subjects.	42.3	52.8	4.8	2.3
Increase the length of the school year by one month.	24.9	69.2	5.9	0.5
No preference	---	---	---	15.8

Note. N.C. = not considered (i.e., was not included in the set of choices).

Public Perceptions of Basic Goals for Secondary Schools

Percent of respondents who believe that . . .	**it is very important for their children to learn what is taught in these courses/experiences**	**this type of experience is more important than the other four choices for their children**
Courses that deal with **job-related skills** (e.g., welding, auto repair, shorthand, and bookkeeping)	47.9	13.7
Academic subjects (e.g., math, science, English, and social studies)	92.2	37.0
Courses that focus on **daily living** (e.g., home management, cooking, and consumer math)	46.6	6.3
Teachers should encourage **personal growth** (i.e., try to build self-understanding, creativity, and self-confidence)	81.7	9.9
Teachers should encourage **social growth** (i.e., try to teach students how to get along with others, to accept social responsibilities and to appreciate their own and other cultures)	78.3	8.6
No clear preference	----	24.5

Level of Public Support for Actions Designed to Pay The **Financial Costs** of Preferred Standards-Raising Initiatives

Would you still want your local schools to take this action if you knew the school board would pay for it by . . .	**eliminating athletics/other extracurricular activities**			**closing local schools**			**increasing your taxes by $200 per year**		
	%yes	%no	no opinion	%yes	%no	no opinion	%yes	%no	no opinion
Have teachers spend one month each summer doing things to improve their teaching.	40.5	53.6	5.9	24.9	68.9	6.2	66.2	28.2	5.6
Limit academic classes to 25 or fewer students.	37.0	56.0	6.9	27.3	68.1	4.6	70.6	25.2	4.2
Pay outstanding teachers higher salaries than others with the same seniority (n=142)	39.4	52.1	8.5	36.6	59.2	4.2	81.7	14.8	3.5
Increase the average salary for teachers to at least $25,000.	39.9	58.0	2.2	30.4	60.1	9.4	84.2	14.4	1.4
Assign disruptive students to alternative classrooms.	40.8	48.8	10.4	28.2	60.5	11.3	57.1	36.5	6.3
Increase the length of the school day by one hour.	29.3	58.5	12.2	22.0	63.4	14.6	75.6	17.1	7.3
Increase the length of the school year by one month.	53.8	38.5	7.7	42.3	50.0	7.7	84.6	11.5	3.8

Public's Willingness to Endure **Personal Costs** Associated With Preferred Standards-Raising Initiatives

	%yes	%no	no opinion
If your child failed the **junior high promotion exam** and had to spend one extra year completing the work needed to pass, would you still want your local schools to require these tests? (n=242)	94.6	3.7	1.7
If your child were convinced by the experience of failing the **junior high promotion exam** that s/he was dumb and not able to succeed in school, would you still want your local schools to require these tests?	82.6	9.9	7.4
Would you still support action (A,B, or C below), if, under these conditions, your child had to give up athletics or other extra-curricular activities to have enough time for schoolwork?			
A. Have **more required courses** than electives (*n*=121)	65.3	30.6	4.1
B. Assign at least 1½ hours of **homework** each day (*n*=75)	72.2	20.8	6.9
C. Have almost all **required courses** focus on academic subjects (*n*=42)	73.8	14.3	11.9
Would you still support (A or C) if, as a result of this action, your child failed two or three **required courses** each year and had to take these classes again?			
A. Have more required courses than electives.	80.2	14.9	5.0
C. Have almost all required courses focus on academic subjects	83.3	14.3	2.4
Would you still want teachers to assign 1½ hours of **homework** each day if, under these conditions, your child had to give up a part-time job to have enough time for school work?	76.7	17.8	5.5

Note: *n* = number of respondents who preferred this action to the other four choices in this subset.

Proponents' Willingness to Endure **Personal and Social Costs** Associated with High School Graduation Exams

Personal Costs:	**%yes**	**%no**	**no opinion**	**sociodemographic differences (see legend)**
Do you think you would still want your local high school to require graduation exams if your child failed the test the first time he or she took them?				
- Proponents (see Notes)	92.1	5.8	2.1	
Do you think you would still favor these exams if your child did not receive a regular high school diploma because he or she was never able to pass the tests?				
- Proponents	80.4	12.5	7.2	
Social Costs:				
Would you still want your local high school to require graduation exams if nearly 50% of the low-income students fail the exams the first time they take them?				
- Proponents	76.1	19.0	4.9	2,3
- Those who Favor	72.1	18.9	9.0	3
Would you still favor these exams if 20% of the low-income students do not receive regular high school diplomas because they are never able to pass the tests?				
- Proponents	78.6	18.1	3.3	4,5,6
- Those who Favor	73.1	18.1	8.7	3

Notes: Proponents (n=574) = those who preferred high school graduation exams to the four other standards-raising proposals involving personal costs.

Those who Favor (n=570) = those who agreed that students in their local high school should be required to pass graduation exams, but did not select these tests as their preferred choice among initiatives involving personal costs.

Legends. Significant differences in response patterns by . . .

1. geographical regions
2. gender
3. age of respondent
4. ethnic groups
5. respondent's level of education
6. family income levels
7. those with and without children in public high schools

Minimum High School Graduation Course Requirements in the States

As of November 1984

STATE	(Numbers Refer to Years of Instruction) English/ Lang. Arts	Social Studies	Mathematics	Science	PE/Health	Electives	Other	Total	Enacted by:	Date of Enactment	Effective for Grad. Class of:	Notes
Alabama	4	3	2	1	3½	6½		20	SBE	5/80	1985	A task force is currently studying graduation requirements, including the possibility of an "advanced" diploma.
Alaska	4	3	2	2	1	9		21	SBE	4/84	1985	
Arizona	4	2	2	2		9½	½ essentials of free enterprise system	20	SBE	2/83	1987	
Arkansas	4	3	5		1	6½	½ fine arts	20	SBE	2/84	1988	Social studies options: 3 units or 2 units social studies and 1 practical arts. Science and mathematics: may be 3 science and 2 math, or 2 science and 3 math.
California	3	3	2	2	2		1 fine arts or foreign language	13	Leg.	1983	1987	The state board has published "Model Graduation Requirements" to be used by local districts as a guide. These include specifics in core subjects plus computer studies and foreign language.
Colorado												Local boards determine requirements. State has constitutional prohibition against state requirements.
Connecticut	4	3	3	2	1	6	1 arts or vocational education	20	Leg.	Sprg. 1984	1988	
Delaware	4	3	2	2	1½	6½		19	SBE	7/83	1987	
Dist. of Columbia Comprehensive	4	2	2	2	1½	8	1 foreign lang.	20½	Bd. of Ed.	1980	1985	Electives must include life skills seminar, or a test can be taken and passed in lieu of the seminar.
Career/Vocational	4	2	2	2	1½	1½	1 foreign lang. 9 specialized preparation	23				
Florida	4	3	3	3	1	9	½ practical or exploratory vocational education; ½ performing fine arts	24	Leg.	1983	1987	22 units required for graduates through 1985-86 school year.
Georgia	4	3	2	2	1	8	1 fine arts, vocational education or computer technology	21	SBE	11/83	1988	
Hawaii	4	4	2	2	1½	6	½ guidance	20	SBE	1978	1983	
Idaho	4	2	2	2	1½	6	½ reading ½ speech ½ consumer education 1 humanities	20	SBE	Sprg. 1984	1988	Humanities will increase to two units after 1988 with a total requirement of 21 units.
Illinois	3	2	2	1	4½	2¼	¼ consumer education 1 art, foreign language, music or vocational education	16	Leg.	5/83	1988	One year of mathematics may be computer technology. One year of soc. studies must be U.S. History or half U.S. History and half American Government.

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As of November 1984

STATE	(Numbers Refer to Years of Instruction) English/ Lang. Arts	Social Studies	Mathematics	Science	PE/Health	Electives	Other	Total	Enacted by:	Date of Enactment	Effective for Grad.Class of:	Notes
Indiana	4	2	2	2	1½	8		19½	SBE	9/83	1989	The state board regulations were approved/signed by the governor in September 1983.
Iowa		1½			1				Leg.			Legislative requirements in effect for many years. Local districts determine remaining requirements.
Kansas	4	3	2	2	1	8		20	SBE	1983	1988	
Kentucky	4	2	3	2	1	7	1 additional mathematics, science, social studies or vocational education	20	SBE	1982	1987	Additional core subject credit is a legislative requirement passed in 1984 (and approved by SBE) to be effective for graduates in 1985. (Graduates in 1985 and 1986 need 18 units to graduate.)
Louisiana	4	3	3	3	2	7½	½ computer literacy	23	SBE	4/84	1990	Graduates in 1988 need 22 units.
Maine	4	1						16	Com. of Ed.			American History is required. Local boards determine remaining requirements.
Maryland	4	3	2	2	1	8		20	SBE	1974		SBE may change.
Massachusetts		1			4				Leg.			Legislative requirements in effect for many years. American History required. Local boards determine additional requirements.
Michigan		½							Leg.			Legislative requirements in effect for many years. Local boards determine additional requirements. The state board, in January 1984, published graduation requirement guidelines which local districts are urged to incorporate.
Minnesota	4	3	1	1	1½	9½		20	SBE	1982	1982	Requirements took effect immediately for all graduates.
Mississippi	3	2½	1	1		8½		16	SBE	1970		In July 1984, the SBE approved new requirements which will be field-tested for two years.
Missouri Standard Diploma	3	2	2	2	1	10	1 practical arts 1 fine arts	22	SBE	3/84	1988	
College Prep Studies Cert.	4	3	3	3	1	8	1 practical arts 1 fine arts	24	SBE	3/84	See Notes	Available to 1985 qualifying graduates. For college preparation, specific core subjects must be taken, and 3 electives must be in advanced courses.
Montana	4	1½ or 2	2	1	1	10½ or 10		20	SBE	Sprg. 1984	1986	Core requirements in effect for several years. State board recently raised the total: 1985 graduates need 18 units; 1986 graduates need 20. Social studies requirement has 2 alternatives.
Nebraska									Leg.	4/84	1991	For graduation, 200 credit hours required, with at least 80% in core curriculum courses. The state board is conducting hearings to define core courses.

Minimum High School Graduation Course Requirements in the States

As of November 1984

STATE	(Numbers Refer to Years of Instruction) English/ Lang. Arts	Social Studies	Mathematics	Science	PE/Health	Electives	Other	Total	Enacted by:	Date of Enactment	Effective for Grad.Class of:	Notes
Nevada	3	2	2	1	2½	9½		20	SBE	7/83	1986	
New Hampshire	4	2½	2	2	1¼	4	½ arts; ½ computer science; 3 from 2 of the following: arts, foreign lang., practical arts, voc. ed.	19¾	SBE	7/84	1989	
New Jersey	4	2	2	1	4	4	1 fine, practical or performing arts; ½ career exploration	18½	SBE			Requirements have been in effect for a number of years.
New Mexico	4	2	2	2	1	9	1 practical arts or fine arts	21	SBE	4/83	1987	In 6/84, the state board required that all students must achieve computer literacy prior to graduation.
New York Local diploma	4	4	2	2	½	varies	1 art and/or music 3 to 5: A sequence of specific courses must be chosen by the student; choices vary for the two different diplomas.	18½	Bd. of Reg.	11/84	1989	½ is health only; 2 non-credit units of PE beyond the total. Comp. tests are required of all students. By 1991, areas covered will include reading, writing, math, Am. history & govt., science & global studies. For a Regents' diploma, comprehensive exams are required in most subjects
Regents' diploma	4	4	2	2	½	varies		18½	Bd. of Reg.	11/84	1989	
North Carolina	4	2	2	2	1	9		20	SBE	1/83	1987	
North Dakota	4	3	2	2	1	5		17	State Supt.	8/83	1984	
Ohio	3	2	2	1	1	9		18	SBE	9/83	1988	
Oklahoma High School grad. req.	4	2	2	2		10		20	SBE	1982	1987	
College prep.	4	2	3	2			4 from: foreign lang., computer science, economics, english, geography, government, math, history, sociology, science, speech, psychology	15	SBE and Reg. of Higher Ed.	1984	1988	Slight variations between 2-/4-year and junior colleges. If foreign lang. elected, 2 years in same language.
Oregon	3	3½	2	2	2	8	½ career dev., 1 applied arts, fine arts or foreign lang.	22	SBE	4/84	1988	
Pennsylvania	4	3	3	3	1		2 arts and humanities	21	SBE	12/83	1989	Local boards determine the remaining 5 units.
Rhode Island Career bound	4	1	1	1		9		16	Bd. of Reg. for El/ Sec Ed.	1962		The Board of Regents is considering changes for both "career-bound" and "college-bound" tracks.
College bound	4	2	3	2		4	2 foreign lang. ½ arts; ½ computer literacy	18		6/83	1988	

Minimum High School Graduation Course Requirements in the States

As of November 1984

STATE	(Numbers Refer to Years of Instruction) English/ Lang. Arts	Social Studies	Mathematics	Science	PE/ Health	Electives	Other	Total	Enacted by:	Date of Enactment	Effective for Grad. Class of:	Notes
South Carolina	4	3	3	2	1	7		20	SBE and passed by leg.	7/84	1987	
South Dakota	4	3	2	2		8	½ computer studies ½ fine arts	20	SBE	2/84	1989	Increased total number of requirements being phased in: 16 through 1986; 18 in 1987; and 19 in 1988.
Tennessee	4	1½	2	2	1½	9		20	SBE	8/83	1987	
Texas High school grad. requirements	4	2½	3	2	2	7	½ economics/ free enterprise	21	SBE	9/84	1988	1½ units of physical education and ½ unit of health education for both programs.
Requirements in addition to high school graduation requirements	4	2½	3	3	2	3	½ economics/ free enterprise 2 foreign lang. 1 computer science 1 fine arts	22	SBE	9/84	1988	
Utah	3	3	2	2	2	9	1½ arts 1 vocational education ½ computer science	24	SBE	1/84	1988	The state board makes specific course recommendations for college entry, vocational, etc.
Vermont	4	3	3	3	1½		1 arts	15½	SBE & approved byleg.	8/84	1989	
Virginia Standard diploma	4	3	2	2	2	6	1 additional science or mathematics	20	SBE	7/83	1988	
Advanced studies diploma	4	3	3	3	2	4	3 foreign language	22	SBE	7/83	Available for 1985 grad.	
Washington	3	2½	2	2	2	5½	1 occupational education	18	SBE & put into statute	1983	1989	The state board added the PE requirement in May 1984.
West Virginia	4	3	2	1	2	7	1 applied arts, fine or performing arts or second lang.	20	SBE	1981	1985	Revisions in the requirements will be made by January 1985.
Wisconsin	4	3	2	2	2		½ computer science	13½	Leg.	Sprg. 1984	1989	Electives are the option of local school districts. The state recommends that districts require a total of 22 units.
Wyoming		1						18				Requirements in effect a number of years. Local boards determine remaining requirements to reach the minimum of 18 total units.

SBE indicates State Board of Education
Leg. indicates Legislature

Source: Education Commission of the States
• 1860 Lincoln St., Suite 300 • Denver, Colo. 80295;
Prepared by Chris Pipho, ECS Clearinghouse, and Patricia Flakus-Mosqueda, ECS Governance Center.

Other AASA Critical Issues Reports

Improving Math & Science Education: Problems and Solutions. This report describes actions that experts say will have the most impact on math and science programs in the nation's schools. Also included are: examples of how school districts are improving math and science education; lists of booklets and other materials developed by states and school districts that are useful resources in grades K-12; and an update on the use of computers and software. (92pp; 1985; $13.95; Stock No. 021-00131)

High Tech for Schools: Problems and Solutions. This report details planning models; examines "computer literacy"; and offers advice on hardware, personnel and staff development, software, and uses of computers in administration and special education. In addition, it discusses other technologies of interest to educators: cable television, electronic networks, and videodiscs. (96pp; 1984; $12.95; Stock No. 021-00122)

The Role of the Principal in Effective Schools: Problems and Solutions. Principals are the "critical agents" who can get things done in schools. This report details the principal's role as instructional leader and manager; training, selection, and evaluation of principals; and how the superintendent/board help principals become more effective. (96pp; 1983; $12.95; Stock No. 021-00839)

Planning for Tomorrow's Schools: Problems and Solutions. This report examines the essential ingredients of effective planning. It offers planning models and checklists; advice on involving staff and community and setting goals and objectives; information on demographics, politics, and finance; attracting top-notch teachers. (80pp; 1983; $12.95; Stock No. 021-00832)

Building Morale . . . Motivating Staff: Problems and Solutions. This report identifies morale builders and morale killers. Also included: case studies of districts with excellent morale; how to determine your district's health; tips on inservice education, communications, evaluation, and managing conflict. (80pp; 1983; $11.95; Stock No. 021-00834)

Teaching Writing: Problems and Solutions. This report describes some of the country's most successful writing programs, how students can be taught to use the writing process, tips on inservice training for teachers, the principal's role, how to assess and grade student writing. (96pp; 1982; $11.95; Stock No. 021-00901)

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Collective Bargaining: Problems and Solutions. This report includes advice on: what to include and to omit from negotiated contracts, table strategies, impasses, contract administration, grievances, communications. Selected as "must reading" by the National School Boards Association. (95pp; 1981; $10.95; Stock No. 021-00330)

Student Discipline: Problems and Solutions. Many measures can be used to prevent unacceptable student behavior. This report defines: how school boards set policy on discipline; using the student handbook to manage student conduct; ways to involve parents; and advice on curriculum improvement, vandalism, smoking, corporal punishment, suspension. Selected as "must reading" by the National School Boards Association in its 1980 review of education books. (80pp; 1980; $9.95; Stock No. 021-00334)

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Teacher Competency: Problems and Solutions. This report tells what research says about "good" teachers, what administrators can do to improve teachers, how to reward teachers for good teaching. Selected as "must reading" by the National School Boards Association in its 1980 review of education books. (80pp; 1980; $8.95; Stock No. 021-00332)

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The Competency Movement: Problems and Solutions. This report explains the pros and cons of the minimum competency movement. It includes: considerations in adopting a student competency policy, what kinds of tests can be used, how districts and states are implementing competency requirements. (92pp; 1978; $8.95; Stock No. 021-00510)

School Energy Crisis: Problems and Solutions. Schools don't have to sit immobilized while they're clobbered by higher energy costs. This report describes solutions, including: energy audits, how to hire energy consultants, transportation tips. (88pp; 1977; $8.95; Stock No. 021-00380)

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